



Operating Instructions and Parts Manual 18" Band Saw

Models: JWBS-18X, JWBS-18X-3



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Part No. M-710750
Revision B 5/05
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This manual has been prepared for the owner and operators of JET JWBS-18X and JWBS-18X-3 Band Saws. Its purpose, aside from machine operation, is to promote safety using accepted operating and maintenance procedures. To obtain maximum life and efficiency from your band saw and to aid in using it safely, please read this manual thoroughly and follow the instructions carefully.

Warranty

WMH Tool Group warrants every product it sells. If one of our tools needs service or repair, one of our Authorized Repair Stations located throughout the United States can give you quick service.

In most cases, any one of these WMH Tool Group Repair Stations can authorize warranty repair, assist you in obtaining parts, or perform routine maintenance and major repair on your JET, Wilton, or Powermatic tools.

For the name of an Authorized Repair Station in your area, please call 1-800-274-6848, or visit www.wmhtoolgroup.com

More Information

WMH Tool Group is consistently adding new products to the line. For complete, up-to-date product information, check with your local WMH Tool Group distributor, or visit www.wmhtoolgroup.com

WMH Tool Group Warranty

WMH Tool Group (including JET, Wilton and Powermatic brands) makes every effort to assure that its products meet high quality and durability standards and warrants to the original retail consumer/purchaser of our products that each product be free from defects in materials and workmanship as follow: 1 YEAR LIMITED WARRANTY ON ALL PRODUCTS UNLESS SPECIFIED OTHERWISE. This Warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence or accidents, normal wear-and-tear, repair or alterations outside our facilities, or to a lack of maintenance.

WMH TOOL GROUP LIMITS ALL IMPLIED WARRANTIES TO THE PERIOD SPECIFIED ABOVE, FROM THE DATE THE PRODUCT WAS PURCHASED AT RETAIL. EXCEPT AS STATED HEREIN, ANY IMPLIED WARRANTIES OR MERCHANTABILITY AND FITNESS ARE EXCLUDED. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG THE IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. WMH TOOL GROUP SHALL IN NO EVENT BE LIABLE FOR DEATH, INJURIES TO PERSONS OR PROPERTY, OR FOR INCIDENTAL, CONTINGENT, SPECIAL, OR CONSEQUENTIAL DAMAGES ARISING FROM THE USE OF OUR PRODUCTS. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

To take advantage of this warranty, the product or part must be returned for examination, postage prepaid, to an Authorized Repair Station designated by our office. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection discloses a defect, we will either repair or replace the product, or refund the purchase price if we cannot readily and quickly provide a repair or replacement, if you are willing to accept a refund. We will return repaired product or replacement at WMH Tool Group's expense, but if it is determined there is no defect, or that the defect resulted from causes not within the scope of WMH Tool Group's warranty, then the user must bear the cost of storing and returning the product. This warranty gives you specific legal rights; you may also have other rights, which vary from state to state.

WMH Tool Group sells through distributors only. WMH Tool Group reserves the right to effect at any time, without prior notice, those alterations to parts, fittings, and accessory equipment, which they may deem necessary for any reason whatsoever.

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Warnings

1. Read and understand the entire owner's manual before attempting assembly or operation.
2. Read and understand the warnings posted on the machine and in this manual. Failure to comply with all of these warnings may cause serious injury.
3. Replace the warning labels if they become obscured or removed.
4. This band saw is designed and intended for use by properly trained and experienced personnel only. If you are not familiar with the proper and safe operation of a band saw, do not use until proper training and knowledge have been obtained.
5. Do not use this band saw for other than its intended use. If used for other purposes, WMH Tool Group disclaims any real or implied warranty and holds itself harmless from any injury that may result from that use.
6. Always wear approved safety glasses/face shields while using this band saw. Everyday eyeglasses only have impact resistant lenses; they are not safety glasses.
7. Before operating this band saw, remove tie, rings, watches and other jewelry, and roll sleeves up past the elbows. Remove all loose clothing and confine long hair. Non-slip footwear or anti-skid floor strips are recommended. Do not wear gloves.
8. Wear ear protectors (plugs or muffs) during extended periods of operation.
9. Some dust created by power sanding, sawing, grinding, drilling and other construction activities contain chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:
 - Lead from lead based paint.
 - Crystalline silica from bricks, cement and other masonry products.
 - Arsenic and chromium from chemically treated lumber.Your risk of exposure varies, depending on how often you do this type of work. To reduce your exposure to these chemicals, work in a well-ventilated area and work with approved safety equipment, such as face or dust masks that are specifically designed to filter out microscopic particles.
10. Do not operate this machine while tired or under the influence of drugs, alcohol or any medication.
11. Make certain the switch is in the OFF position before connecting the machine to the power supply.
12. Make certain the machine is properly grounded.
13. Make all machine adjustments or maintenance with the machine unplugged from the power source.
14. Remove adjusting keys and wrenches. Form a habit of checking to see that keys and adjusting wrenches are removed from the machine before turning it on.
15. Keep safety guards in place at all times when the machine is in use. If removed for maintenance purposes, use extreme caution and replace the guards immediately.
16. Check damaged parts. Before further use of the machine, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.
17. Provide for adequate space surrounding work area and non-glare, overhead lighting.
18. Keep the floor around the machine clean and free of scrap material, oil and grease.
19. Keep visitors a safe distance from the work area. **Keep children away.**



Warnings

20. Make your workshop child proof with padlocks, master switches or by removing starter keys.
21. Give your work undivided attention. Looking around, carrying on a conversation and “horse-play” are careless acts that can result in serious injury.
22. Maintain a balanced stance at all times so that you do not fall or lean against the blade or other moving parts. Do not overreach or use excessive force to perform any machine operation.
23. Use the right tool at the correct speed and feed rate. Do not force a tool or attachment to do a job for which it was not designed. The right tool will do the job better and safer.
24. Use recommended accessories; improper accessories may be hazardous.
25. Maintain tools with care. Keep blades sharp and clean for the best and safest performance. Follow instructions for lubricating and changing accessories.
26. Turn off the machine before cleaning. Use a brush or compressed air to remove chips or debris — do not use your hands.
27. Do not stand on the machine. Serious injury could occur if the machine tips over.
28. Never leave the machine running unattended. Turn the power off and do not leave the machine until it comes to a complete stop.
29. Remove loose items and unnecessary work pieces from the area before starting the machine.

Familiarize yourself with the following safety notices used in this manual:



CAUTION This means that if precautions are not heeded, it may result in minor injury and/or possible machine damage.



WARNING This means that if precautions are not heeded, it may result in serious injury or possibly even death.

- - SAVE THESE INSTRUCTIONS - -

Introduction

This manual is provided by Jet covering the safe operation and maintenance procedures for models JWBS-18X and JWBS-18X-3 Band Saws. This manual contains instructions on installation, safety precautions, general operating procedures, maintenance instructions and parts breakdown. This machine has been designed and constructed to provide years of trouble free operation if used in accordance with instructions set forth in this manual. If there are any questions or comments, please contact either your local supplier or WMH Tool Group. WMH Tool Group can also be reached at our web site: www.wmhtoolgroup.com.

Specifications

| | | |
|---|---|----------------------|
| Model Number..... | JWBS-18X..... | JWBS-18X-3..... |
| Stock Number | 710750..... | 710751..... |
| Cutting Capacity (height) (in.) | 12..... | 12..... |
| Cutting Capacity (width) (in.)..... | 18-3/8..... | 18-3/8..... |
| Maximum Rip Left of Blade w/Fence (in.)..... | 16-1/2..... | 16-1/2..... |
| Maximum Rip Right of Blade w/Fence (in.)..... | 7-5/8..... | 7-5/8..... |
| Blade Length (in.)..... | 137..... | 137..... |
| Blade Speed (SFPM)..... | 3000..... | 3000..... |
| Minimum Blade Width (in.)..... | 1/8..... | 1/8..... |
| Maximum Blade Width (in.)..... | 1-1/2..... | 1-1/2..... |
| Table Size (in.)..... | 19" x 19"..... | 19" x 19"..... |
| Table Tilt (degrees)..... | 45°R to 10°L..... | 45°R to 10°L..... |
| Table Height from Floor (in.)..... | 37-1/2..... | 37-1/2..... |
| Wheel Diameter (in.)..... | 18-5/8..... | 18-5/8..... |
| Dust Chute Diameter (in.) | 4..... | 4..... |
| Overall Dimensions (HxWxD) (in.)..... | 73 x 39 x 32-1/2..... | 73 x 39 x 35..... |
| Motor | 1.75 HP, 1Ph, 115/230V (prewired 115V)..... | 3 HP, 1Ph, 230V..... |
| Net Weight (approx.) (lbs.)..... | 418..... | 425..... |
| Shipping Weight (approx.) (lbs.) | 493..... | 500..... |

The above specifications were current at the time this manual was published, but because of our policy of continuous improvement, WMH Tool Group reserves the right to change specifications at any time and without prior notice, without incurring obligations.

Grounding Instructions

1.75 HP Single Phase Motor

WARNING This machine must be grounded while in use to protect the operator from electric shock.

In the event of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This tool is equipped with an electric cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into a matching outlet that is properly installed and grounded in accordance with all local codes and ordinances.

Do not modify the plug provided. If it will not fit the outlet, have the proper outlet installed by a qualified electrician.

Improper connection of the equipment-grounding conductor can result in a risk of electric shock. The conductor, with insulation having an outer surface that is green with or without yellow stripes, is the equipment-grounding conductor. If repair or replacement of the electric cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal.

Check with a qualified electrician or service personnel if the grounding instructions are not completely understood, or if in doubt as to whether the tool is properly grounded. Use only three wire extension cords that have three-prong grounding plugs and three-pole receptacles that accept the tool's plug.

Repair or replace a damaged or worn cord immediately.

115 Volt Operation

If your band saw's Stock No. is 710750, it is wired from the factory for 115 volt operation. The power cord has a *plug* that looks like A, Fig. 1, and is used in an *outlet* that looks like B, Fig. 1. A *temporary adapter* with a *grounding ear* secured with a *screw* (C, Fig. 1) may be used to connect this plug to a two-pole receptacle if a properly grounded outlet is not available. The temporary adapter should only be used until a properly grounded outlet can be installed by a qualified electrician. **This adapter is not applicable in Canada.** The green colored *grounding ear*, lug, or tab, extending from the adapter, must be connected to a permanent

ground such as a properly grounded outlet box, as shown in C, Fig. 1.

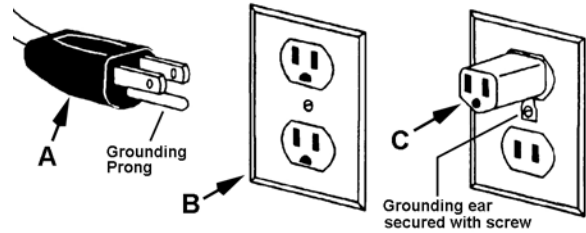


Figure 1

230 Volt Operation

If 230V, single phase operation is desired, the following instructions must be followed:

1. Disconnect the machine from the power source.
2. This band saw is supplied with four motor leads that are connected for 115V operation as shown in A, Fig. 2. For 230V operation reconnect the leads as shown in B, Fig. 2.
3. The 115V attachment plug supplied with the band saw (C, Fig. 2) must be replaced with a UL/CSA listed plug suitable for 230V operation (D, Fig. 2). Contact your local Authorized JET Service Center or qualified electrician for proper procedures to install the plug. The band saw must comply with all local and national codes after the 230V plug is installed.
4. The band saw with a 230V plug should only be connected to an outlet having the same configuration (D, Fig. 2). No adapter is available or should be used with the 230V plug.

Important: In all cases (115 or 230 volts), make certain the receptacle in question is properly grounded. If you are not sure, have a registered electrician check the receptacle.

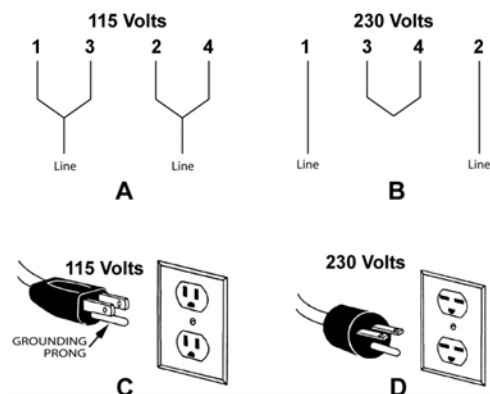


Figure 2

Grounding Instructions

3 HP Single Phase Motor

⚠WARNING Electrical connections must be made by a qualified electrician in compliance with all relevant codes. This machine must be properly grounded to help prevent electrical shock and possible fatal injury.

This machine must be grounded. In the event of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock.

Improper connection of the equipment-grounding conductor can result in a risk of electric shock. The conductor with insulation having an outer surface that is green with or without yellow stripes, is the equipment-grounding conductor. If repair or replacement of the electric cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal.

Check with a qualified electrician or service personnel if the grounding instructions are not completely understood, or if in doubt as to whether the tool is properly grounded.

Repair or replace a damaged or worn cord immediately.

Make sure the voltage of your power supply matches the specifications on the motor plate of the band saw. The machine should be connected to a dedicated circuit.

230 Volt Operation

If your band saw's Stock No. is 710751, it is wired from the factory for 230 volt operation. You may either install a plug or "hard-wire" the band saw directly to a control panel.

If connecting a plug, use a proper UL/CSA listed 2-pole, 3-wire grounding plug suitable for 230V operation.

If the band saw is to be hard-wired to a panel, make sure a disconnect is available for the

operator. During hard-wiring of the band saw, make sure the fuses have been removed or the breakers have been tripped in the circuit to which the band saw will be connected. Place a warning placard on the fuse holder or circuit breaker to prevent it being turned on while the machine is being wired.

Extension cords

The use of an extension cord is not recommended for this band saw. But if one is necessary, make sure the cord rating is suitable for the amperage listed on the machine's motor plate. An undersize cord will cause a drop in line voltage resulting in loss of power and overheating.

Use the chart in Table 1 as a general guide in choosing the correct size cord. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.

Recommended Gauges (AWG) of Extension Cords

| Amps | Extension Cord Length * | | | | | |
|----------|-------------------------|---------|---------|----------|----------|----------|
| | 25 feet | 50 feet | 75 feet | 100 feet | 150 feet | 200 feet |
| < 5 | 16 | 16 | 16 | 14 | 12 | 12 |
| 5 to 8 | 16 | 16 | 14 | 12 | 10 | NR |
| 8 to 12 | 14 | 14 | 12 | 10 | NR | NR |
| 12 to 15 | 12 | 12 | 10 | 10 | NR | NR |
| 15 to 20 | 10 | 10 | 10 | NR | NR | NR |
| 21 to 30 | 10 | NR | NR | NR | NR | NR |

*based on limiting the line voltage drop to 5V at 150% of the rated amperes.
NR: Not Recommended.

Table 1

Unpacking

Contents of Shipping Container

- 1 Band Saw
- 1 Table
- 1 Fence and Rail Assembly
- 1 Resaw Guide and Knob
- 1 Miter Gauge
- 1 Owner's Manual
- 1 Warranty Card
- 1 Accessory Package Contains:
 - Hardware Bag*
 - 2 Knobs
 - 1 Handle
 - 1 10/12mm Wrench
 - Fence Hardware Bag*
 - 4 Hex Cap Screws
 - 4 Flat Washers
 - 4 Lock Washers
 - Rail Hardware Bag*
 - 9 Hex Cap Screws
 - 9 Flat Washers
 - 9 Lock Washers

- 1. Remove the crate and packing material from the band saw except for the transport skid on the bottom.
- 2. Move the saw to its permanent working location. The site should be dry, well lit, and have enough room to handle long stock and the service and/or adjustment of the machine from any side.
- 3. Move the band saw off the skid.
- 4. Clean all rust protected surfaces with a mild solvent or diesel fuel and a soft cloth. Do not use lacquer thinner, paint thinner, or gasoline. These will damage painted surfaces.



Tools Included for Assembly

- 1. 10/12mm Open End Wrench

Tools Required for Assembly & Adjustments

- 2. 14mm Open End Wrench
- 1. Cross Point Screw Driver
- 1. Combination Square

Assembly

Handwheel

Attach the handle (A, Fig. 3) to the handwheel (B, Fig. 3).

Mounting the Table

Important: The table is heavy. Mounting with the help of another person is recommended.

Referring to Figures 4 and 5:

1. Remove the table *insert* (A) and *tapered pin* (B).
2. Slide the table so the *saw blade* (D) passes through the *slot* where the *tapered pin* (B) was located.
3. Rotate the table 90 degrees so that the miter slot (C) is parallel to the blade (D) and to the right of the blade when facing the band saw as viewed in Figure 5.
4. Line up the *table* (H) to the trunnions so that the *bolts* (F) feed through the *support bracket* (E). Secure the table with two *lock knobs* (G). Reinstall the table *insert* (A) and *tapered pin* (B).

Rail Assembly

Referring to Figure 6:

1. Attach the *front rail* (F) to the cast iron table with two 1/4" x 5/8" *hex cap screws*, two 1/4" *lock washers*, and two 1/4" *flat washers*. The screws should be in approximately the center of the slot. Hand-tighten only at this time.
2. Attach the *rear rail* (G) to the table with two 1/4" x 5/8" *hex cap screws*, two 1/4" *lock washers*, and two 1/4" *flat washers*. Screws should be in approximately the center of the slot. Hand-tighten only at this time.
3. Push the front and rear rails *up* as far as they will go.
4. Using a 10mm wrench, tighten the four hex cap screws holding the front and rear rails to the table. Do not over-tighten the screws.
5. Attach the *guide tube* (H) to the front rail with five 1/4" x 5/8" *hex cap screws*, five 1/4" *lock washers*, and five 1/4" *flat washers*. Screws should be in approximately the center of the slot.

Hand-tighten the guide tube only at this time. You will be instructed to secure it later in the *Fence Assembly and Adjustment* section.

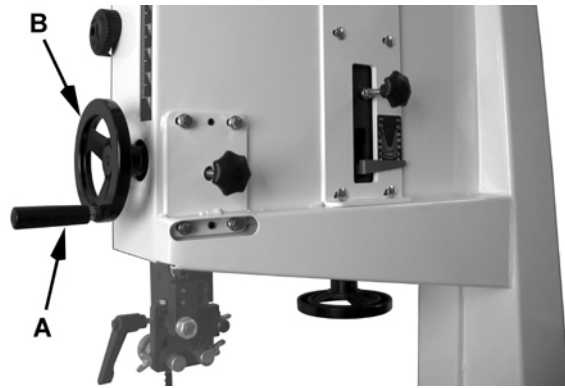


Figure 3

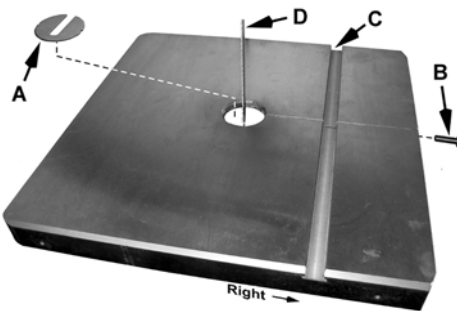


Figure 4

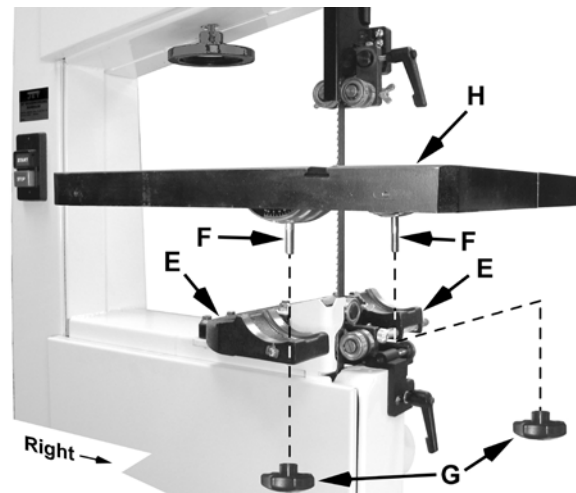


Figure 5

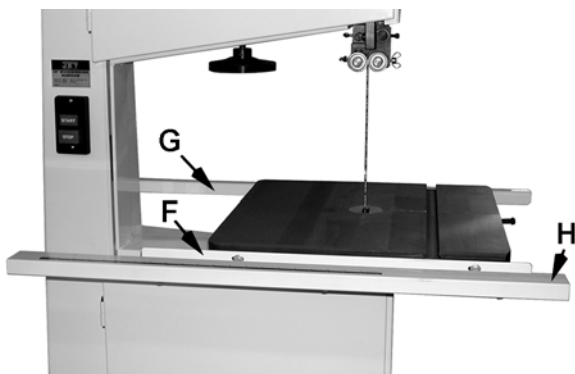


Figure 6

Fence Assembly and Adjustment

Assembling the Fence to Fence Body

Referring to Figure 7:

1. Attach the *fence* (A) to the *fence body* (B) with four 5/16" x 3/4" hex cap screws (C), four 5/16" lock washers (D), and four 5/16" flat washers (E). Hand-tighten only at this time.

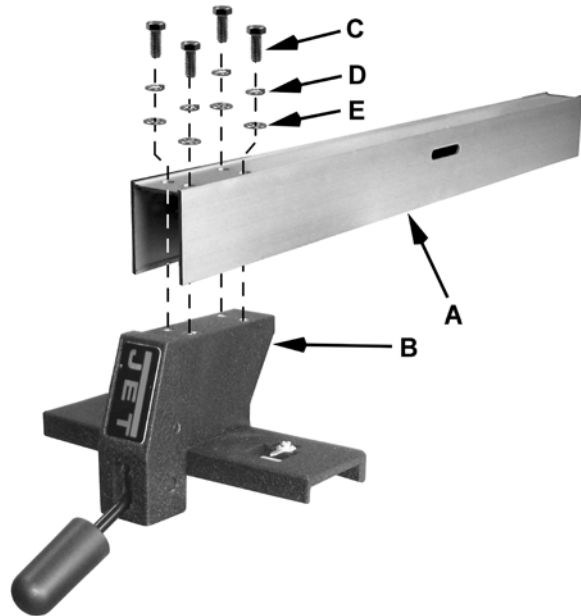


Figure 7

Assembling the Rear Hook

Referring to Figure 8:

2. Thread a 1/4"-20 hex nut (B) onto the pad's threaded stud (A) and insert through the fence (C) so the threaded stud is now inside the fence.
3. Place the rear hook (D) on the threaded stud.

Finish the assembly by placing a 1/4" flat washer (E), 1/4" lock washer (F) and 1/4" hex nut (G) on the threaded stud and finger tighten.

Note: Adjust for a gap of approximately 1/8" between the pad (A) and hook (D) and as shown in the inset.

4. Tighten the assembly using two 10mm wrenches.

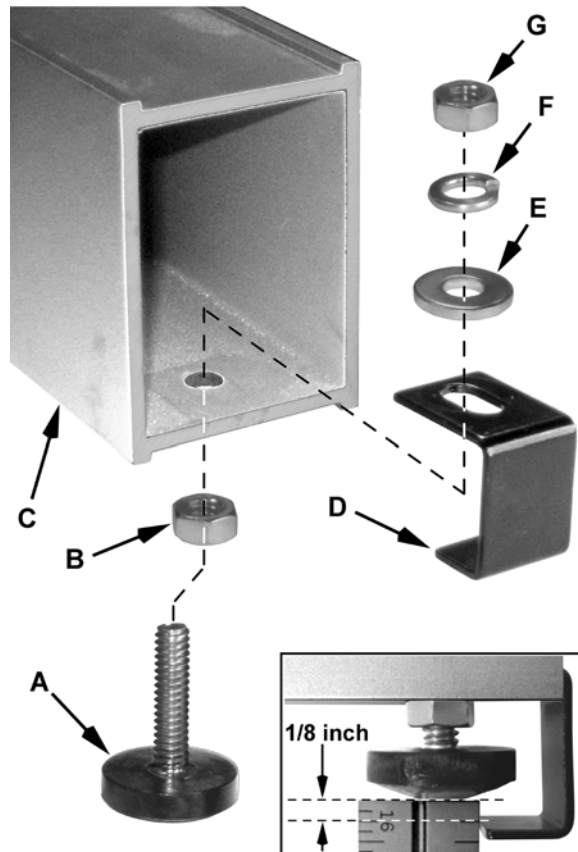


Figure 8

Fence Adjustment

5. Place the fence assembly onto the *guide rail* (D, Fig. 9) and against the edge of the *miter slot* (C, Fig. 9). The hook at the rear of the fence should fit under the rear rail (see Figure 12).

The fence must align parallel to the miter slot along the entire length of the fence.

If adjustment is necessary:

6. Lock the fence by pushing down the *lock handle* (A, Fig. 9). Because the screws are only hand-tight, you can shift the fence slightly as needed until the fence is parallel the miter slot.
7. When the fence has been properly aligned to the miter slot, tighten the four *hex cap screws* (B, Fig. 9) with a 12mm wrench. Make sure the fence remains parallel to the miter slot as you tighten the screws.

Note: This alignment will again be checked once the guide rail has been tightened.

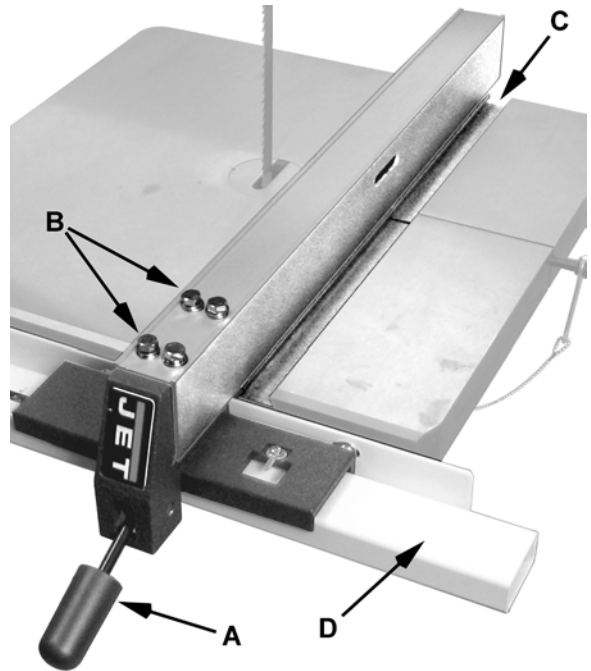


Figure 9

8. Move the fence assembly to the other side of the blade as shown in Figure 10 so that the *pointer* (B, Fig. 10) on the fence body points to zero on the scale. Lock the fence by pushing the *handle* (A, Fig. 10) down.

9. Move the guide rail (D, Fig. 10) with the *locked fence* until the fence is flush against the blade (C, Fig. 10). Do not unlock the fence to perform this. Move the fence and guide rail together when establishing the zero point.

Important: Do not force the fence into the blade so that the blade bends.

10. With a 10mm wrench, tighten the five hex cap screws located on the bottom of the front rail that hold the guide rail to the front rail.

Note: After tightening the guide rail, double check that the fence is still parallel to the miter slot. Make additional adjustments if needed.

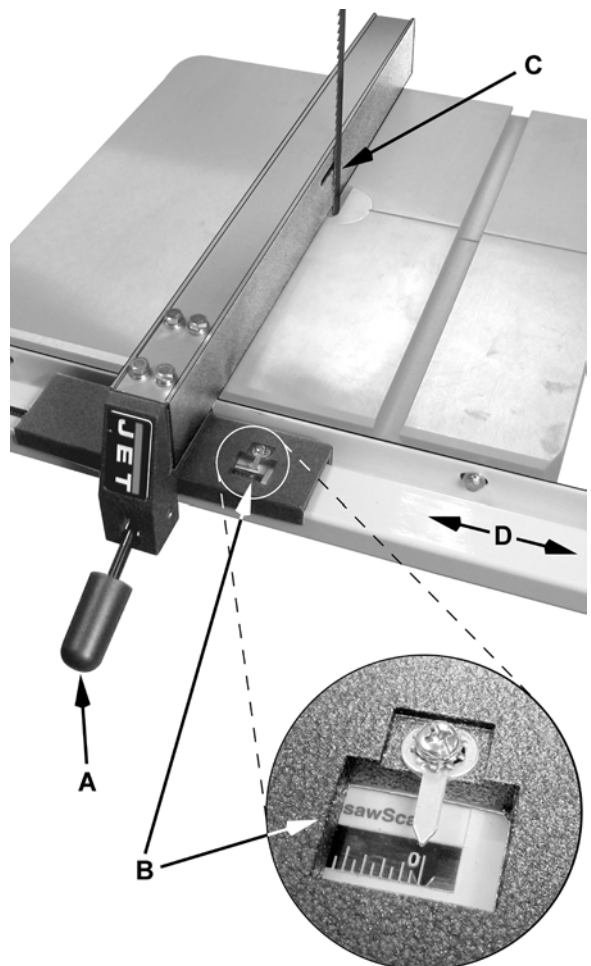


Figure 10

Adjusting Clearance between Fence and Table

Referring to Figures 11 and 12:

Check the clearance between the table and the fence. The fence should not rub against the table surface but be slightly above it. This gap should be the same at the front of the table as it is at the rear.

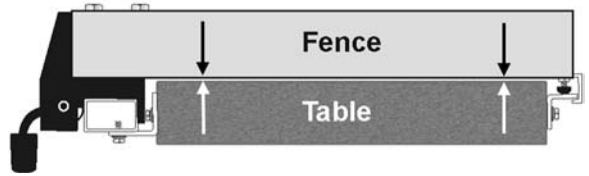


Figure 11

If the gap between fence and table is not consistent, loosen either of the *hex nuts* on the *hook* (Figure 12) and rotate the *sliding pad* until the fence/table gap is consistent across the full length of the table. When this is achieved, tighten both hex nuts.

Check the adjustment of the *hook* at the rear of the fence. The hook should be positioned so that it overlaps the rear rail by approximately 1/8" (Fig. 12). To adjust the hook, loosen the *upper hex nut* and slide the hook in or out as needed. Re-tighten upper hex nut.

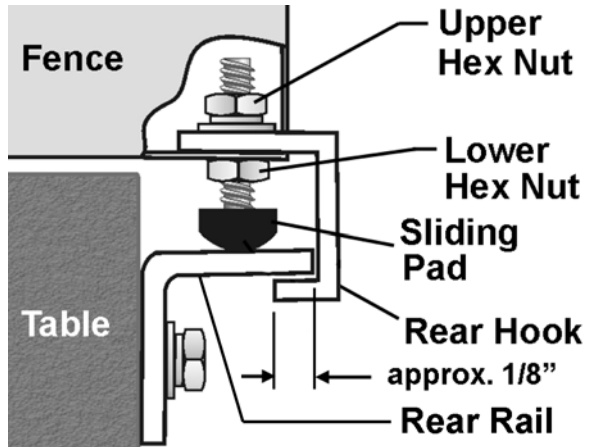


Figure 12

Resaw Guide

For resawing attach the *post* (A, Fig. 13) to the fence with the *lock knob* (B, Fig. 13). There is a slotted hole in the fence that will accommodate the resaw kit. Position the post so that it is centered with the front edge of the blade. The resaw guide will give you a taller, single point contact surface during resawing.

Miter Gauge

1. Place the miter gauge in the table slot.
2. With a square verify the miter gauge face is square to the blade.
3. If the miter gauge is not square to the blade loosen the lock knob (C, Fig. 13) and adjust to the proper setting. Tighten the lock knob.
4. If the pointer is not at 90 degrees, loosen the screw (D, Fig. 13) holding the pointer and move the pointer to 90 degrees.
5. Re-tighten the screw.

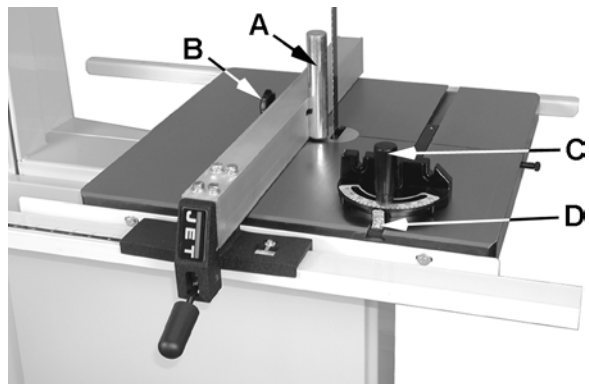


Figure 13

Adjustments

Table Tilt

1. Disconnect machine from power source.
2. Loosen the lock knobs (G, Fig. 14).
3. Tilt table up to 45 degrees to the right, or up to 10 degrees to the left.
4. Tighten the lock knobs.

Note: Table stop bolt (F, Fig. 14) must be removed to tilt table to the left.

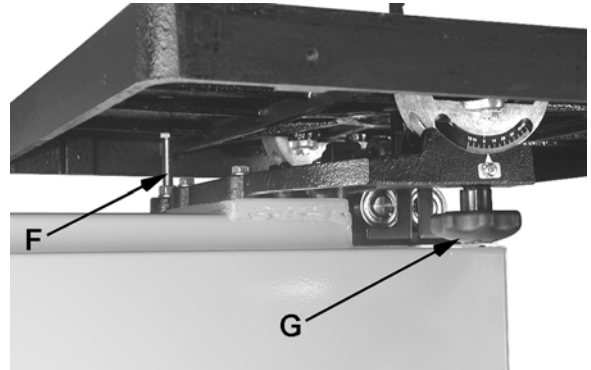


Figure 14

Adjusting 90 Degree Table Stop

Blade tension must be properly adjusted prior to adjusting 90 degree stop. Refer to the *Adjusting Blade Tension* section.

1. Loosen *lock knobs* (C, Fig. 15) and tilt the table until it rests against table stop bolt (B, Fig. 15); then re-tighten the *lock knobs*.
2. Use a *square* (E, Fig. 16) placed on the table and against the blade to see if the table is 90 degrees to the blade.
3. If an adjustment is necessary, loosen the *lock knobs* (C, Fig. 15). Tilt the table until it is square to the blade; then re-tighten the lock knobs.
4. Loosen *lock nut* (A, Fig. 15) and turn table stop bolt (B, Fig. 15) until it contacts the table. Tighten the *nut* (A, Fig. 15) to hold table stop in place. When tightening the nut hold the table stop bolt in place with a wrench to prevent movement.
5. If necessary, adjust the *pointer* (D, Fig. 15) to zero.

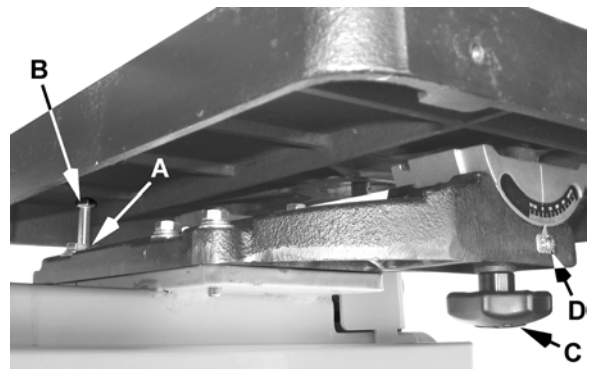


Figure 15

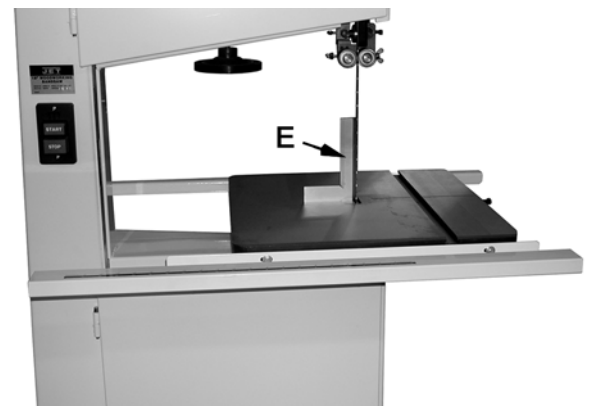


Figure 16

Installing/Changing Blades

⚠WARNING Disconnect machine from power source. Blade teeth are sharp, use care when handling the blade. Failure to comply may cause serious injury.

1. Disconnect machine from power source.
2. Decrease blade tension by rotating the *blade tension handwheel* (A, Fig. 17) according to the arrow direction in until the handwheel stops.
3. Remove the *table insert* (B, Fig. 17).
4. Remove the *tapered pin* (C, Fig. 17) by using the wrench attached with the pin together.
5. Lower the *upper blade guide assembly* (H, fig. 18) by loosening the *knob* (F, Fig. 18) and rotating the *handwheel* (G, Fig. 18).
6. Open *upper and lower front doors* (D, Fig. 17).
7. Carefully remove the blade from between upper and lower blade guides; then remove the blade from the upper and lower wheels.
8. Guide new blade through *table slot* (E, Fig. 17). Place blade in upper and lower blade guides.

Note: Make sure blade teeth point down toward table (see inset, Fig. 17), and toward the front of the saw.

Hint: If the teeth cannot be made to point down, try turning the blade inside out first, then reattempt.

9. Position blade on the middle of the upper and lower wheels.
10. Replace the *table insert* (B, Fig. 17) and *tapered pin* (C, Fig. 17).

Before operating the band saw, the new blade must be adjusted and blade guides re-adjusted. The required adjustments are contained in the sections listed below and which follow immediately:

- Blade Tension (page 16)
- Blade Tracking (page 16)
- Upper Bearing Adjustment (page 17)
- Lower Bearing Adjustment (page 18)

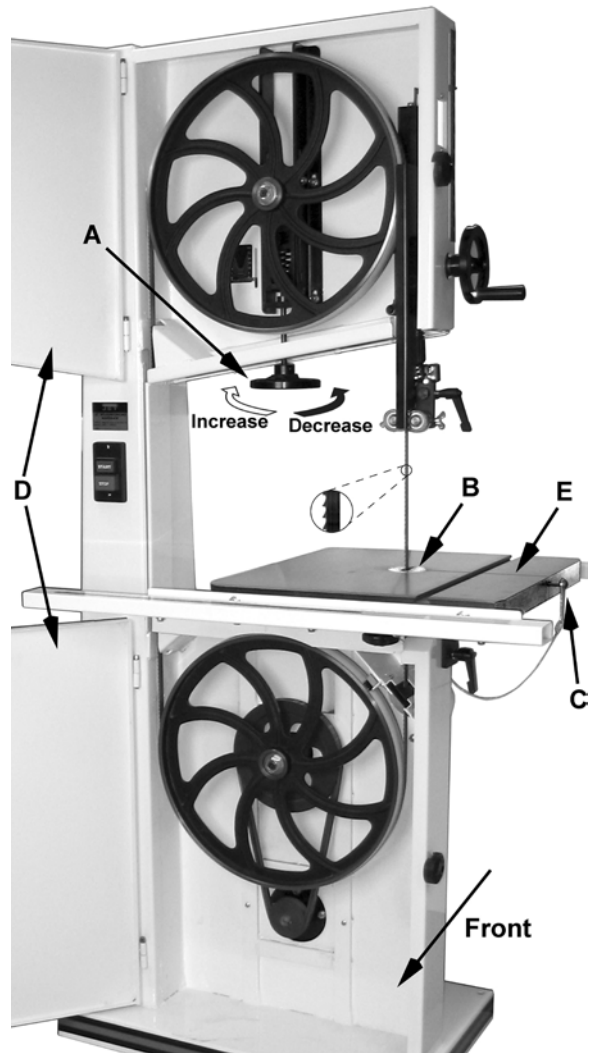


Figure 17

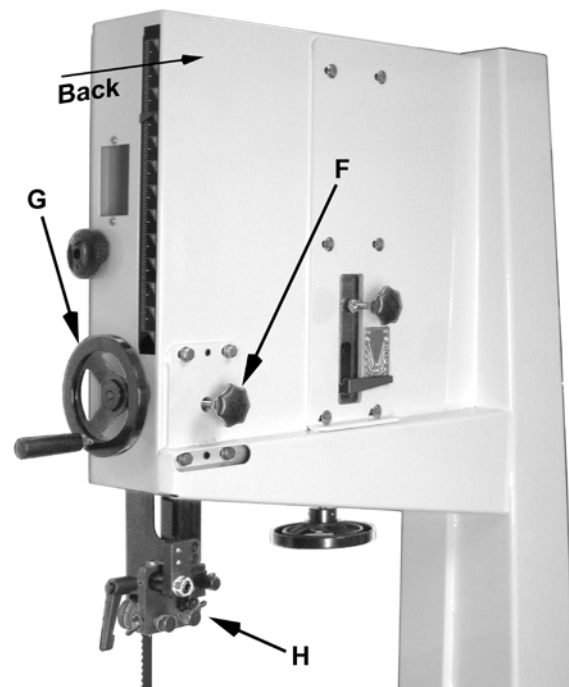


Figure 18

Blade Tension

Blade tension is set with the *blade tension handwheel* (A, Fig. 19) and is performed following blade replacement and periodically as the blade stretches from use.

⚠WARNING Disconnect machine from power source before making any adjustments.

Referring to Figure 19:

1. Set the blade tension by rotating the handwheel according to the *arrow directions* in Figure 19.
2. The *gauge* (B) indicates the approximate tension according to the width of the blade in inches. Initially, set the blade tension to correspond to the width of your blade.

The JWBS-18X and JWBS-18X-3 come with a 3/4" blade so the tension should be set at 3/4" when using this blade.

Note: The tension gauge can also be seen from the front of the saw through the wheel when the upper door is open.

As you become familiar with the saw, you may find it necessary to change the blade tension from the initial setting.

Keep in mind that too little or too much blade tension can cause blade breakage and/or poor cutting performance.

Tip: When the band saw is not being used, slightly release the tension on the blade – this will prolong the blade's life. Make a note of the specific tension setting for that particular blade, as shown on the *gauge* (B). The tension can then be re-set quickly when band saw operations are resumed.

Blade Tracking

Tracking refers to the position of the saw blade on the wheels while the machine is in operation. Tracking has been factory-adjusted. However, it should be checked occasionally, including after every blade change.

⚠WARNING Disconnect machine from power source before making any adjustments.

Important: The blade must be properly tensioned *before* adjusting blade tracking (see previous section). Make sure the blade guides and other parts of the machine will not interfere with the movement of the blade.

To inspect and adjust tracking, proceed as follows:

1. Open upper front door to expose the wheel. Rotate the wheel clockwise by hand and observe the position of the blade on the wheel

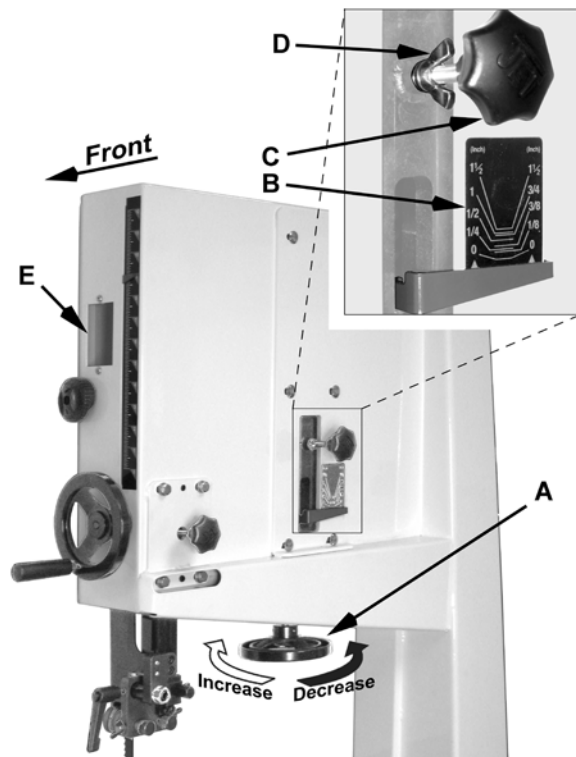


Figure 19

through the window (E, Fig. 19). The blade should ride upon the center of the wheel (Figure 20).

2. If the blade tends to move toward the edge of the wheel, loosen the *wing nut* (D, Fig. 19) and slightly rotate the *knob* (C, Fig. 19). Rotating the knob clockwise will cause the blade to move toward the rear edge of the wheel. Rotating the knob counterclockwise will cause the blade to move toward the front edge of the wheel.
- Note:** This adjustment is sensitive; perform it in small increments and give the blade time to react to the changes as you continue to rotate the wheel.
3. When the blade is tracking properly in the center of the wheel, re-tighten the *wing nut* (D, Fig. 19).
4. Close the upper front door.

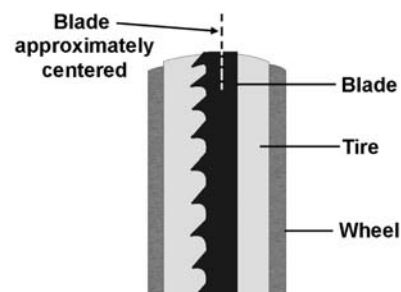


Figure 20

Overview – Bearing Adjustments

Thrust (back support) bearing are located behind the saw blade and provide support to the back of the blade when the saw is in operation.

Guide bearings are located on either side of the saw blade and provide stability for the blade when the saw is in operation. These bearings rotate on an eccentric shaft so the distance from the blade can be adjusted for optimal performance.

Upper Bearing Adjustments

⚠WARNING Unplug the machine from power source before making any adjustments! Blade teeth are sharp - use care when working near the saw blade. Failure to comply may cause serious injury.

Note: Blade tension must be properly adjusted prior to bearing guide setup. Refer to the *Adjusting Blade Tension* section.

To adjust the thrust bearing (while referring also to Figure 21):

1. Loosen the *thumb screw* (E) and slide the bearing and bearing post until the space between the *thrust bearing* (H) and the back edge of the *blade* (G) is approximately 1/64".

A convenient way to achieve this spacing is by placing a dollar bill folded twice (four thicknesses) between the blade and support bearing – four thicknesses of a dollar bill is approximately 1/64".

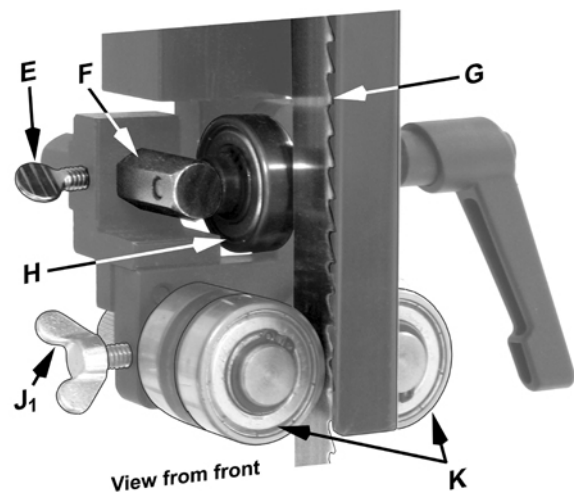


Figure 21

To adjust the guide bearings (refer to Figure 22):

2. Loosen the *locking handle* (L) and slide the assembly until the front of the *guide bearings* rest just behind the *gullet* of the blade teeth (see inset).
3. Loosen two *wing nuts* (J₁, J₂). Rotate the *adjustment handles* (M) until the *guide bearings* (K) rest lightly against the *blade* (N). *Do not force* the guide bearings against the side of the blade.
4. Tighten *wing nuts* (J₁, J₂ Fig. 22).

Check to make sure the adjustments have not changed and the bearing guides do not pinch the blade.

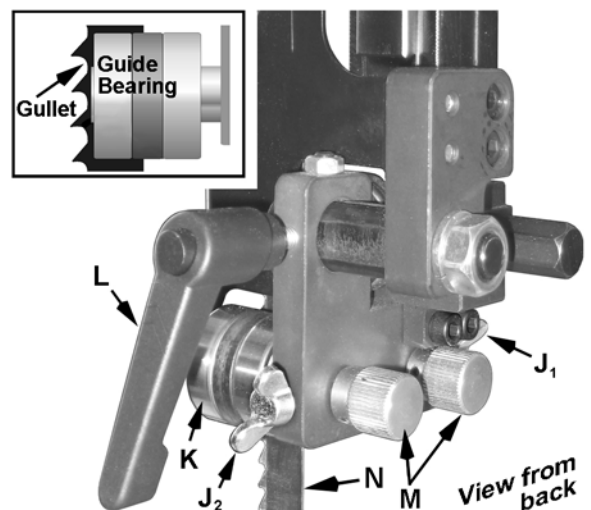


Figure 22

Lower Bearing Adjustments

⚠WARNING Unplug the machine from power source before making any adjustments! Blade teeth are sharp - use care when working near the saw blade. Failure to comply may cause serious injury.

Note: Blade tension must be properly adjusted prior to bearing guide setup. Refer to the *Adjusting Blade Tension* section.

Referring to Figure 23:

1. Loosen the *thumb screw* (B).

This will allow the *thrust bearing* (A) to move freely and prevent interference with the *saw blade* (C) during the following steps.

Guide Bearings Adjustment

2. Loosen the *locking handle* (D) then turn the *adjustment screw* (E) to adjust the assembly forward or backward until the front of the *guide bearings* (F) rest just behind the *gullet* of the blade teeth (C and inset).

3. Tighten the *locking handle* (D).

Thrust Bearing Adjustment

4. With the *thumb screw* still loose (from Step 1), slide the *thrust bearing* and *bearing post* until the space between the *bearing* (A) and the back edge of the *blade* (C) is approximately 1/64".

A convenient way to achieve this spacing is by placing a dollar bill folded twice (four thicknesses) between the blade and support bearing – four thicknesses of a dollar bill is approximately 1/64".

5. Tighten the *thumb screw* (B).
4. Loosen the *lock knob* (G). Rotate the *adjustment handles* (H) until the *guide bearings* (F) rest lightly against the *blade* (C). *Do not force* the guide bearings against the side of the blade.
5. Tighten the *lock knob* (G).

Check to make sure the adjustments have not changed and the bearing guides do not pinch the blade.

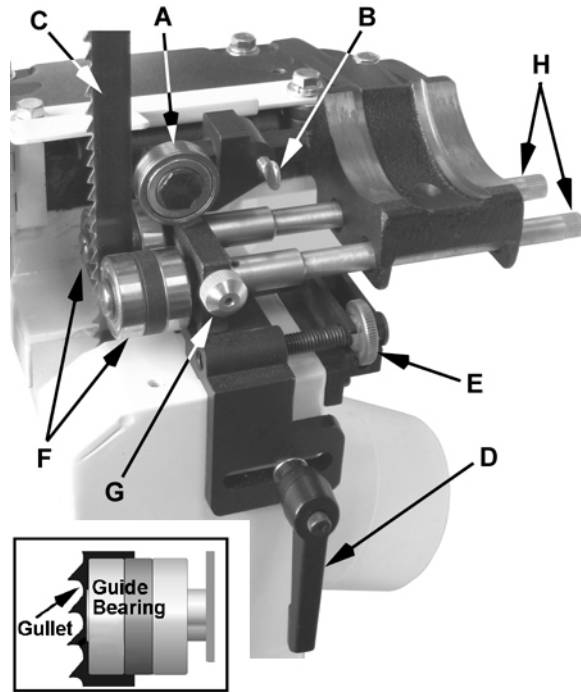


Figure 23

Blade Lead

Blade drift (also known as *lead* or *fence drift*) is a problem that may occur when the blade begins to wander off the cutting line even when the band saw fence is being used. Figure 24 shows an example of blade lead.

Blade lead can be caused by a number of factors, and these should all be checked and corrected if necessary:

- Fence is not parallel to miter slot and blade.
- Blade is not tensioned correctly.
- Blade is dull.
- Teeth have too much “set” on one side of the blade.

If replacement of the blade is not currently an option, the blade lead can be compensated for by skewing the fence. Proceed as follows:

1. Cut a scrap piece of wood about the same length as the band saw table, and joint one edge along its length, or rip it on a table saw to give it a straight edge.
2. Draw a line on the board parallel with the jointed, or straight edge of the board.
3. Move the band saw fence out of the way, and carefully make a freehand cut along your drawn line on the board. Stop about midway on the board, and shut off the band saw (allow the blade to come to a complete stop) but do not allow the board to move.
4. Clamp the board to the table.
5. Slide the band saw fence over against the board until it contacts the straight edge of the board at some point. Lock the fence down.
6. Loosen the four hex cap screws at the top of the fence (see Figure 9) and shift the fence until it is parallel to the board along its length.
7. Re-tighten the four hex cap screws.

Note: Skewing the fence to correct blade lead is effective for that particular blade; when a new blade is installed, the fence will probably need re-adjustment.

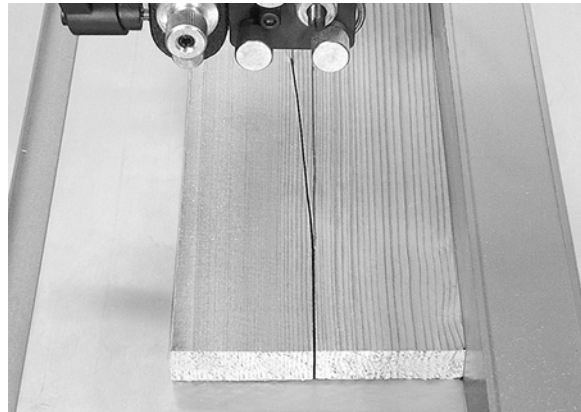


Figure 24

Replacing the V-Belt

⚠WARNING Disconnect machine from power source before making any adjustments.

1. Release blade tension as described in the *Blade Tension* section.
2. Release belt tension by loosening the two *hex cap screws* (A, B, Fig. 25). The pivot bolt (B) is not visible.
3. Raise the motor and place a block of wood under the motor to take the tension off the belt.
4. Open the lower wheel door (C, Fig. 26) and remove the *hex nut* and *washer* (D, Fig. 26).
5. Remove the *wheel* (E, Fig. 27). If the lower wheel does not come off easily you may need to use a pulley puller to remove it.

Note: If you are doing a pulley alignment *only*, skip Step 6.

6. Remove the *old belt* (F, Fig. 27) and install the new belt.
7. Since the wheel is still off, this is the most convenient time to check the wheel and motor pulley alignment. Jump to the *Pulley Alignment* procedure (following page) at this time. At the conclusion you will be redirected back here.
8. Reinstall the lower wheel, hex nut and washer and tighten the hex nut.
9. Remove the wood block or support from below the motor.

Important: Before operating the band saw, refer to the sections listed below and perform the required adjustments described in them.

- Installing/Changing Blades (page 15)
- Belt Tension (below)
- Blade Tension (page 16)
- Blade Tracking (page 16)
- Upper Bearing Adjustments (page 17)
- Lower Bearing Adjustments (page 18)

Belt Tension

The drive belt and pulleys are properly adjusted at the factory. However, belt tension should be occasionally checked. The belt will need to be re-tensioned after belt replacement.

⚠WARNING Disconnect machine from power source before making any adjustments.

1. Release belt tension by loosening the two *hex cap screws* (A, B, Fig. 25). The pivot bolt (B) is not visible.
2. Set the belt tension by lightly pressing down on

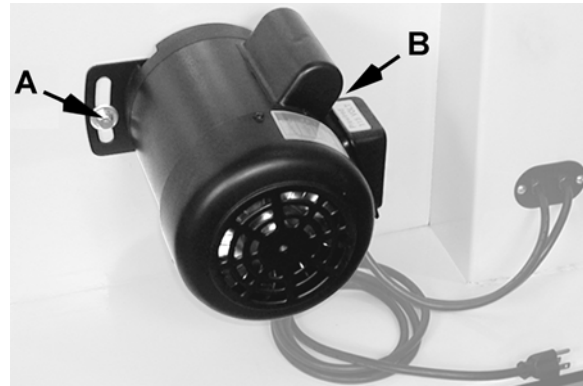


Figure 25

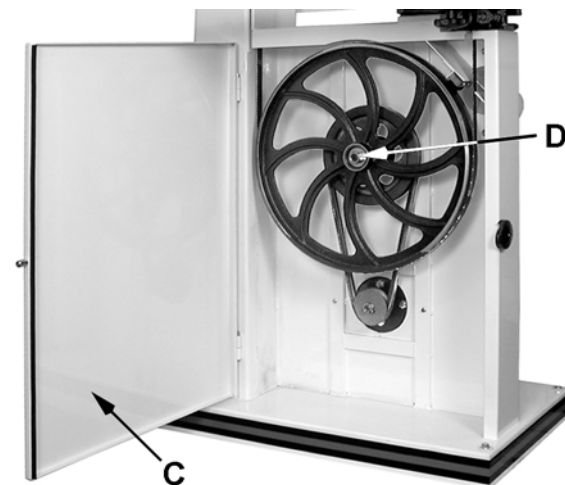


Figure 26

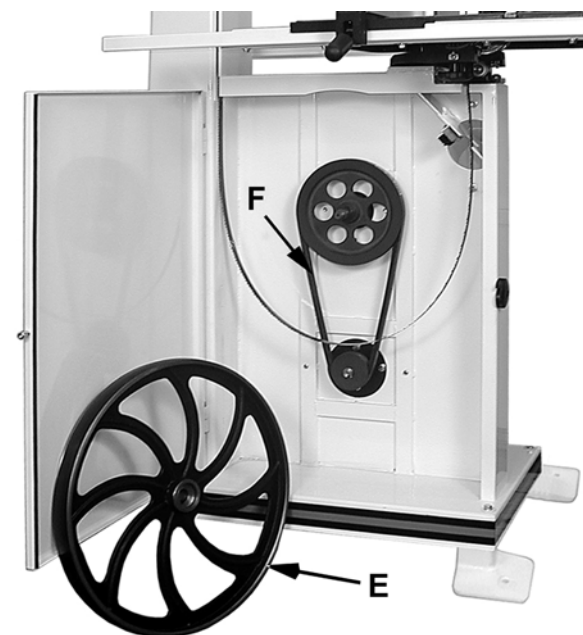


Figure 27

the motor.

The weight of the motor should put enough tension on the belt. You just want to push down lightly to take up any slack.

3. Tighten the two *hex cap screws* (A , B).

Note: A new belt may stretch slightly during the “breaking in” process, and the tension may occasionally need to be checked and adjusted.

Pulley Alignment

The pulley alignment is done in conjunction with the V-belt replacement.

If you are just beginning the alignment, start with the *Replacing the V-Belt* section (previous page).

If you were directed here, proceed as follows:

1. Uses a straight edge placed against the wheel pulley and motor pulley and refer to Figure 28 to determine if alignment is necessary.

If alignment is necessary:

2. With a 4mm hex wrench, loosen two set screws on the motor (lower) pulley.
3. Adjust the motor pulley by sliding in or out.
4. Confirm the alignment of the V-belt by placing a straight edge against the faces of both pulleys, (Figure 28). If the straight edge lies flush against both pulleys, then the pulleys and belt are aligned.
5. Re-tighten the two set screws on the motor pulley.
6. Return to *Step 8* of the *Replacing V-Belt* section on page 20.

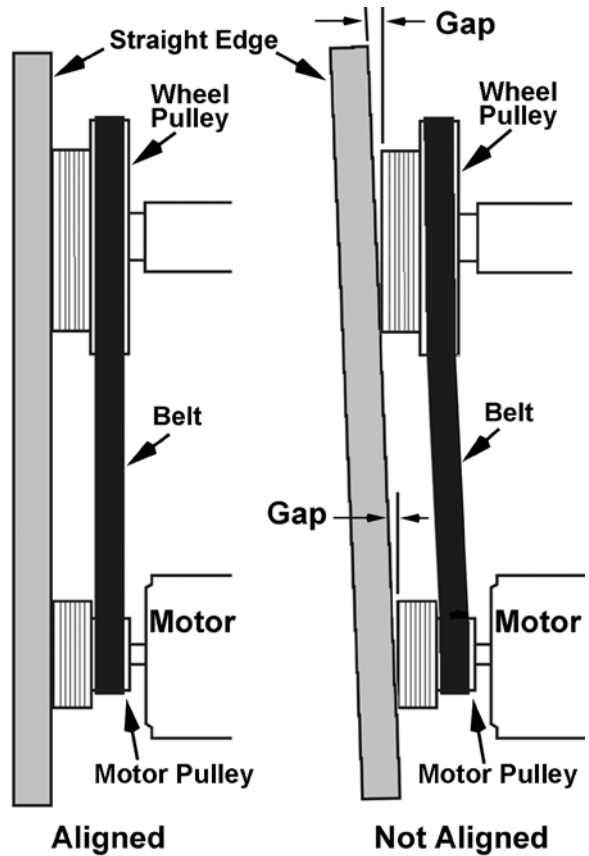


Figure 28

Electrical Connections

⚠WARNING All electrical connections must be done by a qualified electrician. Failure to comply may result in loss of property and/or serious injury.

JWBS-18X is rated at 1.75 HP, 1Ph, 115/230V, prewired 115V.

The band saw comes with a 115V plug (A, Fig. 29). If you switch to 230V a plug needs to be purchased for the band saw that matches the 230V outlet you intend to use.

Confirm power at the site is the same as the saw before making any electrical connections. Review the wiring diagram on page 38.

Review *Grounding Instructions* on page 7.

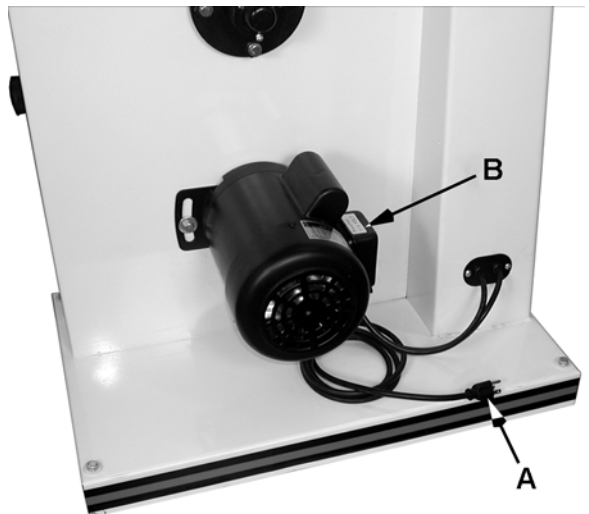


Figure 29

Operation

General Procedure

1. Make sure the blade and upper and lower bearings are properly adjusted for tension and tracking.
2. Adjust blade guide assembly so that the guide bearings are just above the workpiece (about 3/16") allowing minimum exposure to the blade. See Figure 30.
3. If using the fence, move it into position and lock it to the guide rail. If you are using the miter gauge for a crosscut, the fence should be moved safely out of the way.
4. Turn on the band saw and allow a few seconds for the machine to reach full speed.

⚠WARNING Whenever possible, use a push stick, hold-down, power feeder, jig, or similar device while feeding stock, to prevent your hands getting too close to the blade.

5. Place the straightest edge of the workpiece against the fence, and push the workpiece slowly into the blade. Do not force the workpiece into the blade.

⚠CAUTION When cutting, do not overfeed the blade; overfeeding will reduce blade life, and may cause the blade to break.

6. When cutting long stock, the operator should use roller stands, support tables, or an assistant to help stabilize the workpiece.

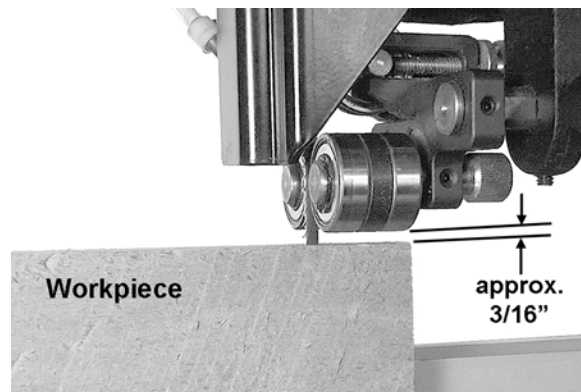


Figure 30

Ripping

Ripping is cutting lengthwise down the workpiece, and with the grain (of wood stock). See Figure 31.

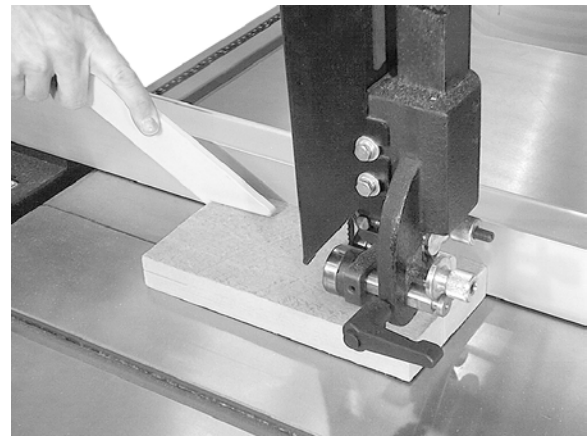


Figure 31

Crosscutting

Crosscutting is cutting across the grain of the workpiece, while using the miter gauge to feed the workpiece into the blade.

Slide the bar of the miter gauge into the end of the slot on the table.

The right hand should hold the workpiece steady against the miter gauge, while the left hand pushes the miter gauge past the blade, as shown in Figure 32.

Do not use the fence in conjunction with the miter gauge. The offcut of the workpiece must not be constrained during or after the cutting process.

⚠CAUTION Using the fence in conjunction with the miter gauge can cause binding and possible damage to the blade.

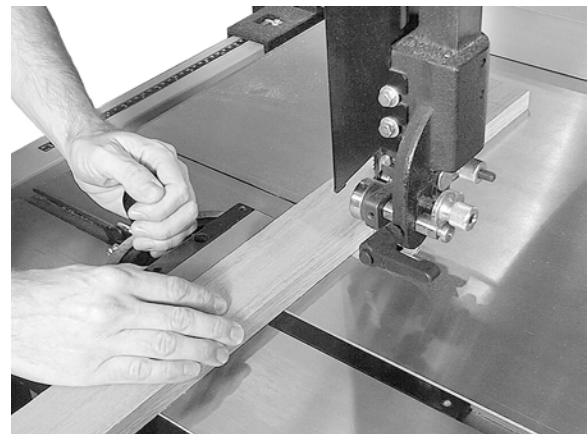


Figure 32

Resawing

Resawing is the process of slicing stock to reduce its thickness, or to produce boards that are thinner than the original workpiece. Figure 33 demonstrates resawing.

The ideal blade for resawing is the widest one the machine can handle, as the wider the blade the better it can hold a straight line.

When resawing thin stock, use a push block, push stick, or similar device to keep your hands away from the blade.

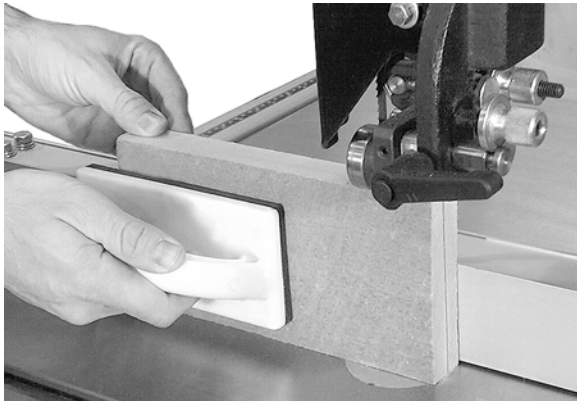


Figure 33

Saw Blade Selection

Using the proper blade for the job will increase the operating efficiency of your band saw, help reduce necessary saw maintenance, and improve your productivity. Thus, it is important to follow certain guidelines when selecting a saw blade.

Here are factors to consider when selecting a blade:

- The type of material you will be cutting.
- The thickness of the workpiece or part.
- The features of the workpiece or part, such as bends or curves with small radii.

These factors are important because they involve basic concepts of saw blade design. There are five (5) blade features that are normally changed to meet certain kinds of sawing requirements. They are:

1. width
2. pitch (number of teeth per inch),
3. tooth form (or shape),
4. the "set" of the teeth
5. the blade material itself.

Width

Band saw blades come in different standard widths, measured from the back of the blade to

the tip of the tooth. Generally, wider blades are used for ripping or making straight cuts; narrower blades are often used when the part being cut has curves with small radii. When cutting straight lines with a narrow blade, the blade may have a tendency to wander, causing *blade lead*. (refer to the *Blade Lead* section in *Adjustments*).

Pitch

Pitch is measured in "teeth per inch" (TPI). Figure 34 shows blades with different pitches. A fine pitch (more teeth per inch) will cut slower but smoother. A coarse pitch (fewer teeth per inch) will cut rougher but faster. As a rule of thumb, the thicker the workpiece, the coarser will be the blade pitch. If you have to cut a hard or very brittle material, you will probably want to use a blade with a finer pitch in order to get good clean cuts.

General rule: Use a blade that will have no fewer than 6 and no more than 12 teeth in the workpiece at any given time.

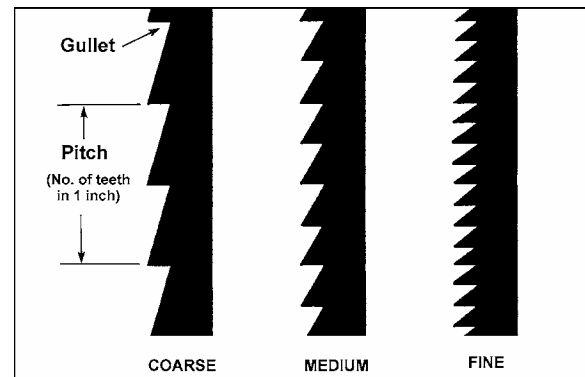


Figure 34

Shape

Figure 35 shows common types of tooth shape. Tooth shape has an effect on cutting rate, and with few exceptions, the Skip and Hook types are used to obtain higher feed rates when cutting thick workpieces. Variable-tooth blades are also available, which combine features of the other styles.

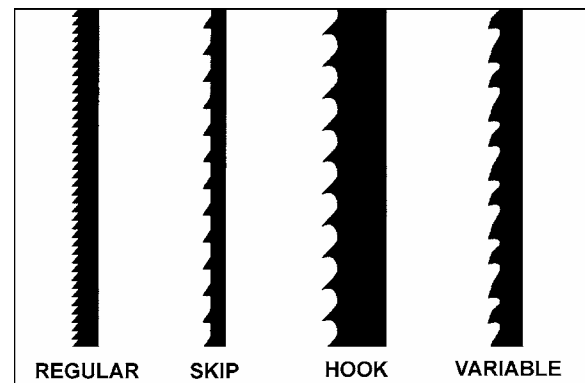


Figure 35

Set

The term "set" refers to the way in which the saw teeth are bent or positioned. Set patterns are usually selected depending on the type of material that needs to be cut. Three common set patterns are shown in Figure 36.

Generally, the Raker set is used for cutting metal workpieces; the Wave set, when the thickness of the workpiece changes, such as cutting hollow tubing or structurals. The Straight set is most often preferred when cutting wood or plastics.

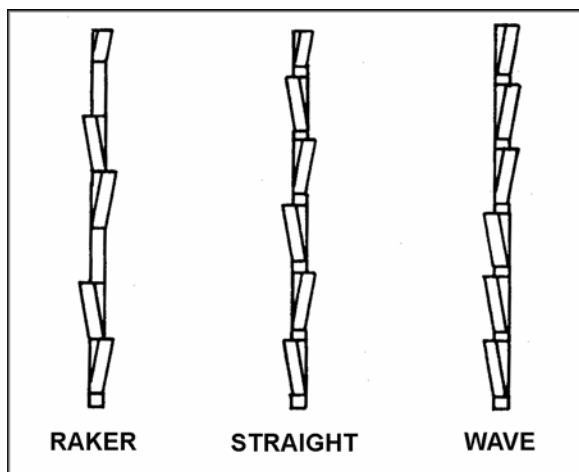


Figure 36

Material

Band saw blades can be made from different types of materials. Some of the most common include spring steel, carbon steel, carbon steel equipped with a high speed or welded edge (bi-metal), or carbide tips. A special type of saw blade is made from "high speed steel"; these should not be used on band saws with low rates of speed.

Because of the importance of blade selection, it is recommended that you use the blade selection guide on page 25.

WARNING When cutting, do not overfeed the blade; overfeeding will reduce blade life, and may cause the blade to break.

Blade Breakage

Band saw blades are subject to high stresses and breakage may sometimes be unavoidable. However, many factors can be controlled to help prevent most blade breakage. Here are some common causes for breakage:

1. Misalignment of the blade guides

2. Feeding work too fast
3. Using a wide blade to cut a short radius curve
4. Excessive tension
5. Teeth are dull or improperly set
6. Upper guides are set too high off the workpiece
7. Faulty weld on blade

Maintenance

WARNING Before any intervention on the machine, disconnect it from the electrical supply by pulling out the plug. Failure to comply may cause serious injury.

Keep bearing guides clean and free of build-up.

Check that the cleaning brush over the band wheel is working properly, and remove any deposits from the band wheels to avoid vibration and blade breakage.

The table surface should be kept clean and free of rust for best results. Some users prefer a paste wax coating. Another option is talcum powder applied with a blackboard eraser rubbed in vigorously once a week; this will fill casting pores and form a moisture barrier. This method provides a table top that is slick and allows rust rings to be easily wiped from the surface. Important also is the fact that talcum powder will not stain wood or mar finishes as wax pickup does.

Do not let saw dust build up in the upper and lower wheel housings. Vacuum out frequently.

Connect the band saw to a JET dust collection system.

Clean and grease the raising/lowering rack for the upper bearing guides if it becomes difficult to raise or lower.

Clean and oil the tensioning mechanism if it becomes difficult to adjust.

Vacuum out the motor fan cover.

Blade Selection Guide

Identify the material and thickness of your workpiece. The chart will show the recommended PITCH, blade TYPE, and FEED RATE.

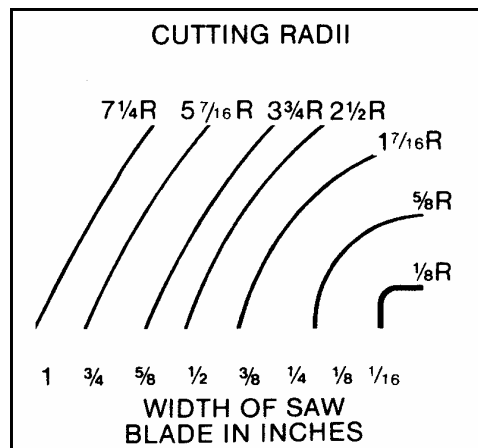
Key: H – Hook L – Low
 S – Skip M – Medium
 R – Regular H – High

Example: 10/H/M means 10 teeth per inch / Hook Type Blade / Medium Feed

| MATERIAL/S | | WORKPIECE THICKNESS | | | |
|------------|-------------|---------------------|--------|-------|-------|
| | | 1/2" | 1" | 3" | 6+" |
| WOODS | HARDWOOD | 10/R/L | 8/R/L | 3/H/M | 3/H/M |
| | SOFTWOOD | 10/R/L | 8/R/L | 3/H/M | 3/H/M |
| NON-METALS | CARBON | 10/R/L | 6/R/L | 3/S/M | 3/S/M |
| | MICA | 32/R/L | — | — | — |
| | ASBESTOS | 8/R/L | 6/R/L | 3/S/M | 3/S/M |
| | HARD RUBBER | 10/R/L | 8/R/L | 6/R/M | 2/S/H |
| PLASTICS | FORMICA | 14/R/M | 10/R/M | 4/H/H | 4/H/H |
| | MASONITE | 10/R/L | 4/S/L | 3/S/M | 3/H/M |
| | MICARTA | 14/R/M | 10/R/M | 4/H/H | 3/H/H |
| | PLEXIGLAS | 10/R/L | 6/R/L | 3/S/M | 3/S/M |
| | PAPER | 14/R/L | 10/R/L | 4/S/L | 3/S/M |

Study the part drawing or prototype, or actually measure the smallest cutting radius required, and locate this radius (in inches) on the chart at the right. Follow the curve to where the approximate blade width is specified. If a radius falls between two of the curves, select the widest blade that will saw this radius.

This procedure should be used for making initial blade selections. These recommendations can, of course, be adjusted to meet specific requirements of a cutting job. Compromises may be necessary if you cannot find all needed specifications in a single blade.



Troubleshooting

| Trouble | Probable Cause | Remedy |
|--|--|--|
| Saw stops or will not start | Saw unplugged | Check plug connections |
| | Fuse blown, or circuit breaker tripped | Replace fuse, or reset circuit breaker |
| | Cord damaged | Replace cord |
| Does not make accurate 45° or 90° cuts | Stop not adjusted correctly | Check blade with square and adjust stop |
| | Angle pointer not set accurately | Check blade with square and adjust pointer |
| | Miter gauge out of adjustment | Adjust miter gauge |
| Blade wanders during cut | Fence not aligned with blade | Check and adjust fence |
| | Warped wood | Select another piece of wood |
| | Excessive feed rate | Reduce feed rate |
| | Incorrect blade for cut | Change blade to correct type |
| | Blade tension not set properly | Set blade tension according to blade size |
| | Guide bearings not set properly | Review guide bearing adjustment. |
| Saw makes unsatisfactory cuts | Dull blade | Replace blade |
| | Blade mounted wrong | Teeth should point down |
| | Gum or pitch on blade | Remove blade and clean |
| | Incorrect blade for cut | Change blade to correct type |
| | Gum or pitch on table | Clean table |
| Blade does not come up to speed | Extension cord too light or too long | Replace with adequate size and length cord |
| | Low shop voltage | Contact your local electric company |
| Saw vibrates excessively | Base on uneven floor | Reposition on flat, level surface |
| | Bad v-belt | Replace v-belt |
| | Motor mount is loose | Tighten motor mount hardware |
| | Loose hardware | Tighten hardware |

Optional Accessories: Band Saw Blades

| Stock No. | Material | Length | Width | Thickness | Type | TPI |
|-----------|---------------|--------|-------|-----------|-------|-----|
| 710030 | Carbon Steel | 137" | 1/4" | 0.025" | Skip | 6 |
| 710031 | Carbon Steel | 137" | 3/8" | 0.025" | Skip | 4 |
| 710032 | Carbon Steel | 137" | 1/2" | 0.025" | Hook | 3 |
| 710033 | Carbon Steel | 137" | 3/4" | 0.032" | Hook | 3 |
| 710034 | Carbon Steel | 137" | 1" | 0.035" | Hook | 2 |
| 710035 | Carbon Steel | 137" | 1.25" | 0.035" | Hook | 1.3 |
| 710036 | Carbon Steel | 137" | 1/4" | 0.025" | Hook | 6 |
| 710037 | Carbon Steel | 137" | 1/4" | 0.025" | Raker | 14 |
| 710038 | Carbon Steel | 137" | 3/8" | 0.025" | Hook | 4 |
| 710039 | Carbon Steel | 137" | 3/8" | 0.025" | Raker | 14 |
| 710040 | Carbon Steel | 137" | 1/2" | 0.025" | Hook | 3 |
| 710041 | Carbon Steel | 137" | 1/2" | 0.025" | Hook | 6 |
| 710042 | Carbon Steel | 137" | 3/4" | 0.032" | Hook | 3 |
| 710043 | Carbon Steel | 137" | 3/4" | 0.032" | Raker | 10 |
| 710044 | Carbon Steel | 137" | 1" | 0.035" | Hook | 6 |
| 710045 | Carbon Steel | 137" | 1" | 0.035" | Hook | 10 |
| 710046 | Carbon Steel | 137" | 1.25" | 0.035" | Hook | 1.3 |
| 710047 | Silicon Steel | 137" | 3/16" | 0.025" | Raker | 10 |
| 710048 | Silicon Steel | 137" | 3/8" | 0.025" | Hook | 6 |
| 710049 | Silicon Steel | 137" | 3/8" | 0.025" | Raker | 10 |
| 710050 | Silicon Steel | 137" | 3/8" | 0.025" | Raker | 14 |
| 710051 | Silicon Steel | 137" | 1/2" | 0.025" | Hook | 4 |
| 710052 | Silicon Steel | 137" | 1/2" | 0.025" | Hook | 6 |
| 710053 | Silicon Steel | 137" | 3/4" | 0.032" | Hook | 3 |
| 710054 | Silicon Steel | 137" | 3/4" | 0.032" | Raker | 10 |

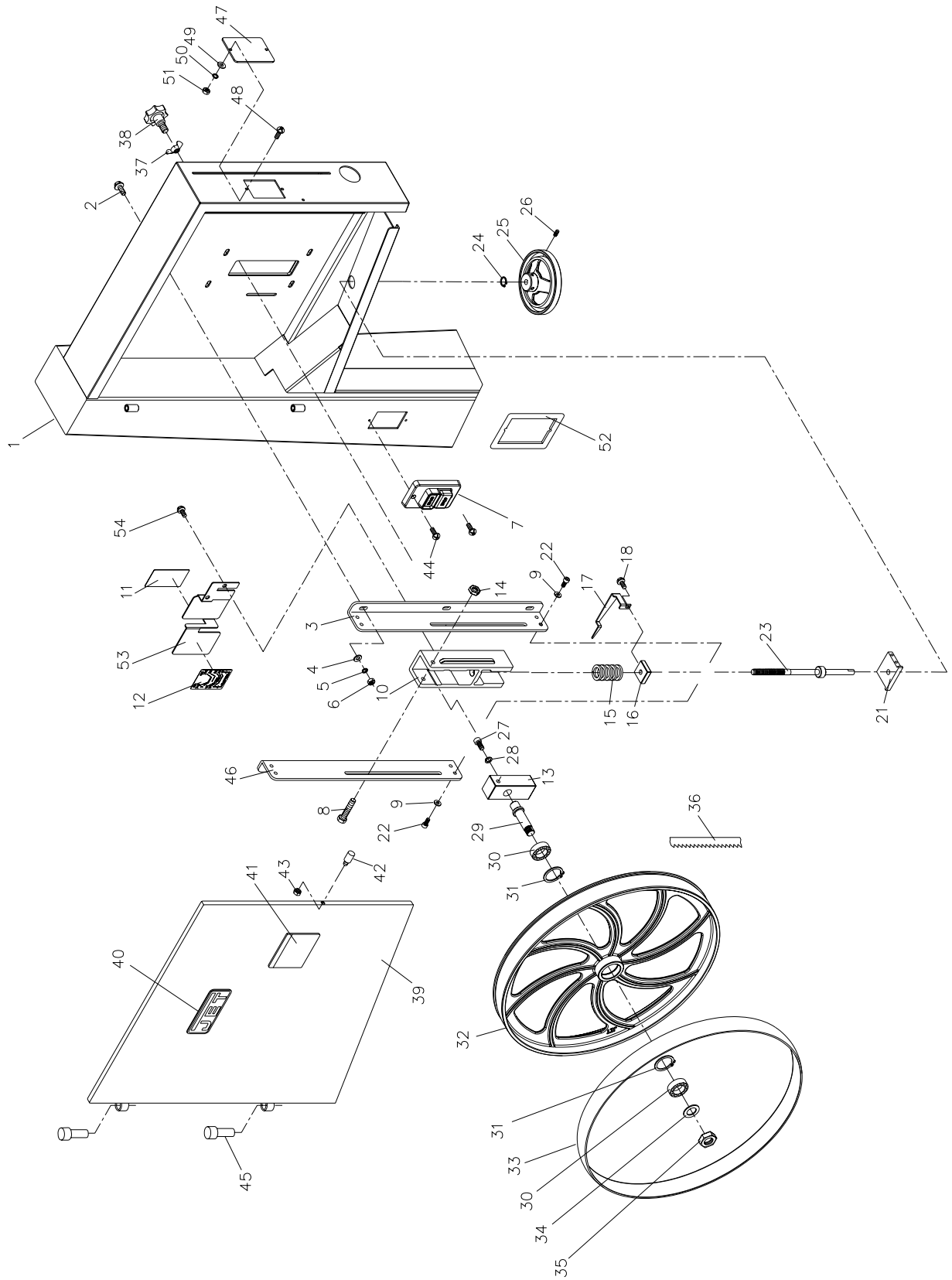
Replacement Parts

Replacement parts are listed on the following pages. To order parts or reach our service department, call 1-800-274-6848 between 7:30 a.m. and 5:30 p.m. (CST), Monday through Friday. Having the Model Number and Serial Number of your machine available when you call will allow us to serve you quickly and accurately.

Parts List: Upper Wheel Assembly

| Index No. | Part No. | Description | Size | Qty |
|-----------|---------------|-----------------------------------|----------------|-----|
| 1 | JWBS18DX-101 | Saw Body | 1.75HP | 1 |
| | JWBS18DX-101A | Saw Body | 3HP | 1 |
| 2 | TS-0152011 | Carriage Bolt | 5/16-18 x 1 | 6 |
| 3 | JWBS18DX-103 | Upper Wheel Bracket (Right Side) | | 1 |
| 4 | TS-0680031 | Flat Washer | 5/16 | 6 |
| 5 | TS-0720081 | Lock Washer | 5/16 | 6 |
| 6 | TS-0561021 | Hex Nut | 5/16-18 | 6 |
| 7 | JWBS18-107 | Switch | 1.75HP | 1 |
| | JWBS18DX-107A | Magnetic Switch | 3HP | 1 |
| 8 | TS-1490151 | Hex Cap Screw | M8 x 80 | 1 |
| 9 | TS-0680021 | Flat Washer | 1/4 | 4 |
| 10 | JWBS18DX-110 | Sliding Bracket | | 1 |
| 11 | JWBS18DX-111 | Blade Tension Indicator (Outside) | | 1 |
| 12 | JWBS18DX-112 | Blade Tension Indicator (Inside) | | 1 |
| 13 | JWBS18DX-113 | Shaft Bracket | | 1 |
| 14 | TS-1540061 | Hex Nut | M8 | 1 |
| 15 | JWBS18-115 | Spring | | 1 |
| 16 | JWBS18-116 | Square Nut | | 1 |
| 17 | JWBS18DX-117 | Pointer | | 1 |
| 18 | JWBS18-118 | Screw | M5 x 8 | 1 |
| 21 | JWBS18DX-121 | Bracket | | 1 |
| 22 | TS-0050021 | Hex Cap Screw | 1/4-20 x 5/8 | 4 |
| 23 | JWBS18DX-123 | Blade Adjusting Screw | | 1 |
| 24 | JWBS18-124 | E-Ring | E-9 | 1 |
| 25 | JWBS18-125 | Hand Wheel | | 1 |
| 26 | TS-0267041 | Set Screw | 1/4-20 x 3/8 | 2 |
| 27 | TS-0209021 | Socket Head Cap Screw | 3/8-16 x 5/8 | 1 |
| 28 | TS-0720091 | Lock Washer | 3/8 | 1 |
| 29 | JWBS18-129 | Upper Wheel Shaft | | 1 |
| 30 | BB-6203ZZ | Ball Bearing | | 2 |
| 31 | JWBS18-131 | Retaining Ring | R40 | 2 |
| 32 | JWBS18-132 | Upper Wheel | | 1 |
| 33 | JWBS18DX-133 | Tire | | 1 |
| 34 | JWBS18-134 | Flat Washer | | 1 |
| 35 | JWBS18-135 | Hex Nut | 5/8-18UNF L.H. | 1 |
| 36 | | Blade (See Accessories) | 137" | 1 |
| 37 | TS-0590061 | Wing Nut | 5/16 | 1 |
| 38 | JWBS18-138 | Lock Knob | 5/16 | 1 |
| 39 | JWBS18DX-139 | Upper Front Door | | 1 |
| 40 | JWBS18-140 | JET Nameplate | | 1 |
| 41 | JWBS18-141 | Warning Label | | 1 |
| 42 | JWBS18-142 | Bolt | | 1 |
| 43 | TS-0561011 | Hex Nut | 1/4-20 | 1 |
| 44 | TS-081C052 | Screw | #10-24 x 3/4 | 2 |
| 45 | JWBS18-39A | Door Hinge Pin | | 2 |
| 46 | JWBS18DX-146 | Upper Wheel Bracket (Left Side) | | 1 |
| 47 | JWBS18DX-147 | Tracking Window | | 1 |
| 48 | TS-081C032 | Screw | #10-24x1/2 | 2 |
| 49 | TS-1550031 | Flat Washer | M5 | 2 |
| 50 | TS-2361051 | Lock Washer | M5 | 2 |
| 51 | TS-0560071 | Hex Nut | #10-24 | 2 |
| 52 | JWBS20-544 | Switch Plate (Only for 3HP model) | | 1 |
| 53 | JWBS18DX-153 | Scale Bracket | | 1 |
| 54 | JWBS18DX-154 | Screw | #10-24x3/8 | 2 |

Upper Wheel Assembly

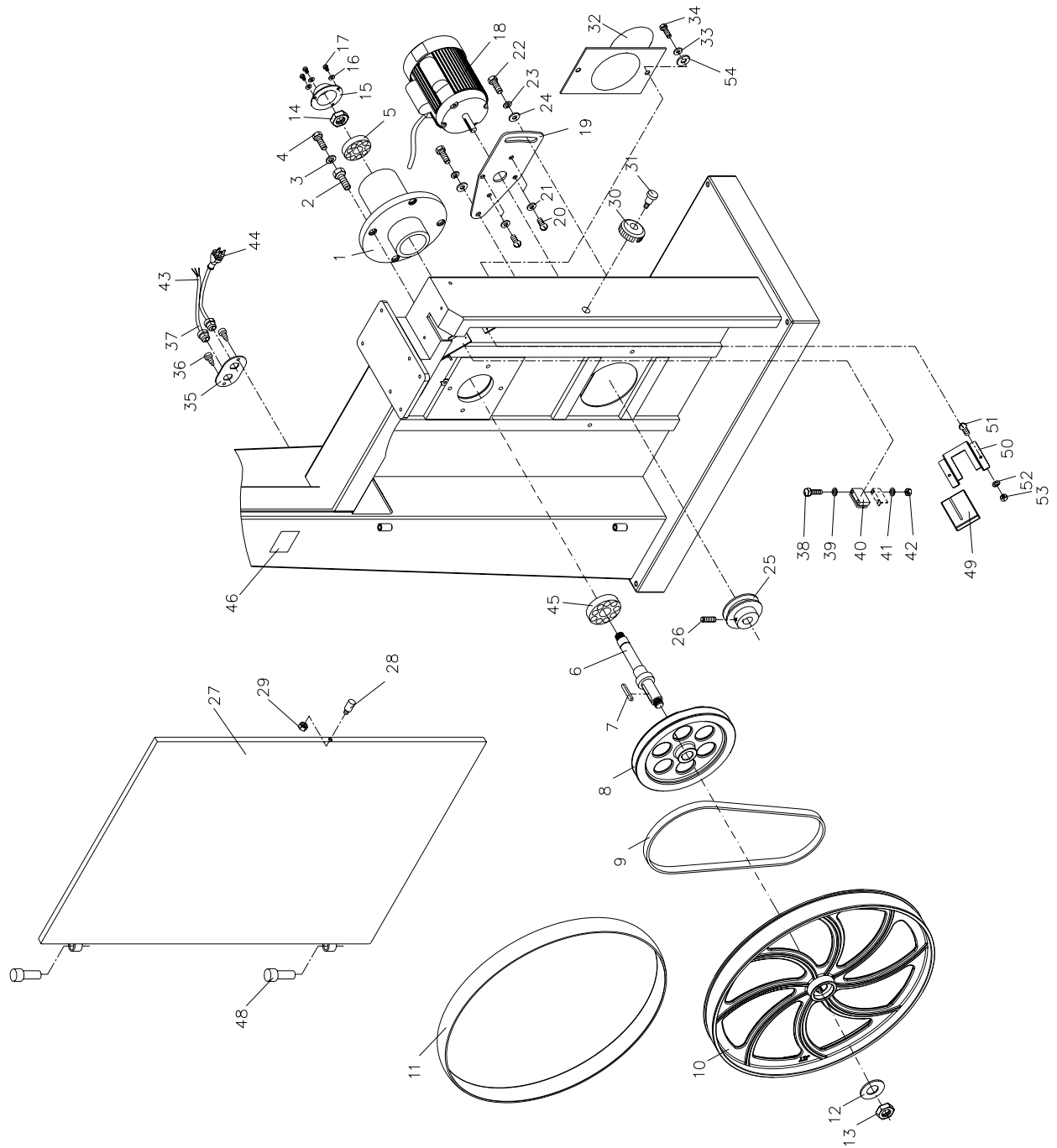


Parts List: Lower Wheel and Motor Assembly

| Index No. | Part No. | Description | Size | Qty |
|-----------|---------------|---|----------------|-----|
| 1 | JWBS18-201 | Bearing Base | | 1 |
| 2 | JWBS20-62 | Adjusting Bolt | | 4 |
| 3 | TS-0720091 | Lock Washer | 3/8 | 4 |
| 4 | TS-0060081 | Hex Cap Screw | 3/8-16 x 1-3/4 | 4 |
| 5 | BB-6204ZZ | Ball Bearing | | 2 |
| 6 | JWBS18-206 | Spindle | | 1 |
| 7 | JWBS18-207 | Key | 7 x 7 x 40 | 1 |
| 8 | JWBS18-208 | Spindle Pulley | | 1 |
| 9 | VB-B42 | V-Belt | B-42 | 1 |
| 10 | JWBS18-210 | Lower Wheel | | 1 |
| 11 | JWBS18DX-133 | Tire | | 1 |
| 12 | TS-0680081 | Flat Washer | 5/8 | 1 |
| 13 | JWBS18-135 | Hex Nut | 5/8-18UNF L.H. | 1 |
| 14 | JWBS18-214 | Hex Nut | 5/8-18UNF R.H. | 1 |
| 15 | JWBS18-215 | Bearing Cover | | 1 |
| 16 | TS-0720051 | Lock Washer | #10 | 3 |
| 17 | TS-081C022 | Screw | #10-24 x 3/8 | 3 |
| 18 | JWBS18DX-218 | Motor 1.75HP, 1Ph, 115/230V (prewired 115V) | | 1 |
| | JWBS18DX-218A | Motor 3HP, 1Ph, 230V | | 1 |
| | JWBS18X-MFC | Motor Fan Cover (not shown) | | 1 |
| 19 | JWBS18-219 | Motor Bracket | | 1 |
| 20 | TS-0081031 | Hex Cap Screw | 5/16-18 x 3/4 | 4 |
| 21 | TS-0680031 | Flat Washer | 5/16 | 4 |
| 22 | TS-0060051 | Hex Cap Screw | 3/8-16 x 1 | 2 |
| 23 | TS-0720091 | Lock Washer | 3/8 | 2 |
| 24 | TS-0680041 | Flat Washer | 3/8 | 2 |
| 25 | JWBS18-225 | Motor Pulley | | 1 |
| 26 | TS-0267041 | Set Screw | 1/4-20 x 3/8 | 2 |
| 27 | JWBS18DX-227 | Lower Front Door | | 1 |
| 28 | JWBS18-142 | Bolt | | 1 |
| 29 | TS-0561011 | Hex Nut | 1/4-20 | 1 |
| 30 | JWBS20-2 | Lock Knob | | 1 |
| 31 | TS-081F052 | Screw | 1/4-20 x 3/4 | 1 |
| 32 | JWBS20-8W | Dust Chute | | 1 |
| 33 | TS-0680031 | Flat Washer | 5/16 | 2 |
| 34 | TS-0051051 | Hex Cap Screw | 5/16-18 x 1 | 2 |
| 35 | JWBS18-235 | Plate | | 1 |
| 36 | TS-081C032 | Screw | #10-24 x 1/2 | 2 |
| 37 | JWBS18-237 | Strain Relief Bushing | | 2 |
| 38 | TS-081C082 | Screw | #10-24 x 1-1/2 | 2 |
| 39 | TS-1550031 | Flat Washer | M5 | 2 |
| 40 | JWBS18-240 | Brush | | 1 |
| 41 | TS-2361051 | Lock Washer | M5 | 2 |
| 42 | TS-0560071 | Hex Nut | #10-24 | 2 |
| 43 | JWBS18-243 | Motor Cord | 1.75HP | 1 |
| | JWBS18DX-243A | Motor Cord | 3HP | 1 |
| 44 | JWBS18-244 | Power Cord | 1.75HP | 1 |
| | JWBS18DX-244A | Power Cord | 3HP | 1 |
| 45 | BB-6205ZZ | Ball Bearing | 6205ZZ | 1 |
| 46 | JWBS18DX-246 | I.D. Label | 1.75HP | 1 |
| | JWBS18DX-246A | I.D. Label | 3HP | 1 |
| 48 | JWBS18-39A | Door Hinge Pin | | 2 |
| 49 | JWBS18DX-249 | Bracket | | 1 |
| 50 | JWBS18DX-250 | Shelf | | 1 |
| 51 | TS-081C032 | Screw | #10-24x1/2 | 2 |

| | | | | |
|----|-------------------|----------------------|--------------|---------|
| 52 |TS-1550031 | Flat Washer | M5 | 2 |
| 53 |TS-0560071 | Hex Nut | #10-24 | 2 |
| 54 |JWBS18DX-254 | Plastic Washer | 5/16 | 1 |

Lower Wheel and Motor Assembly



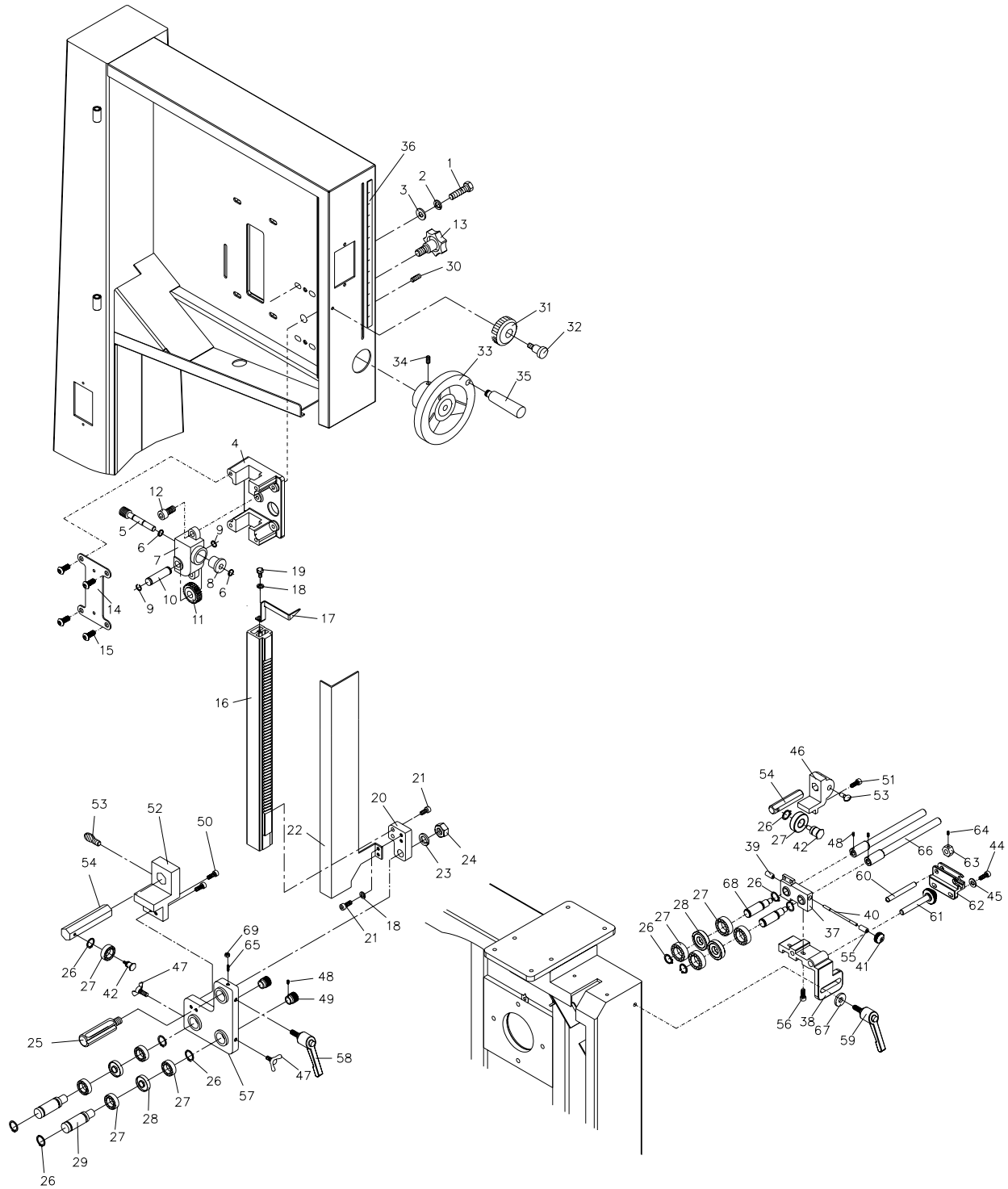
Parts List: Blade Guide Assembly

| Index No. | Part No. | Description | Size | Qty |
|-----------|--------------|--------------------------|-----------------|-----|
| 1 | TS-0051051 | Hex Cap Screw | 5/16-18 x 1 | 4 |
| 2 | TS-0720081 | Lock Washer | 5/16 | 4 |
| 3 | TS-0680031 | Flat Washer | 5/16 | 8 |
| 4 | JWBS18DX-304 | Guide Bar Bracket | | 1 |
| 5 | JWBS18-305 | Worm | | 1 |
| 6 | JWBS18-306 | E-Ring | E-8 | 2 |
| 7 | JWBS18-307 | Gear Base | | 1 |
| 8 | JWBS18-308 | Bushing | | 1 |
| 9 | JWBS18-309 | C-Ring | S-12 | 2 |
| 10 | JWBS18-310 | Shaft | | 1 |
| 11 | JWBS18-311 | Gear | | 1 |
| 12 | TS-0208071 | Socket Head Cap Screw | 5/16-18 x 1-1/4 | 2 |
| 13 | JWBS18-313 | Lock Knob | 5/16 | 1 |
| 14 | JWBS18DX-314 | Plate | | 1 |
| 15 | TS-0255021 | Button Head Socket Screw | 5/16-18 x 1/2 | 4 |
| 16 | JWBS18DX-316 | Guide Bar | | 1 |
| 17 | JWBS18DX-317 | Pointer | | 1 |
| 18 | TS-0720071 | Lock Washer | 1/4 | 3 |
| 19 | TS-0050011 | Hex Cap Screw | 1/4-20 x 1/2 | 1 |
| 20 | JWBS18-320N | Guide Bracket | | 1 |
| 21 | TS-0207021 | Socket Head Cap Screw | 1/4-20 x 1/2 | 4 |
| 22 | JWBS18X-322 | Blade Guard | | 1 |
| 23 | TS-0720111 | Lock Washer | 1/2 | 1 |
| 24 | TS-0561051 | Hex Nut | 1/2 | 1 |
| 25 | JWBS18DX-325 | Locking Shaft | | 1 |
| 26 | JWBS20-326 | C-Ring | | 10 |
| 27 | BB-6202ZZ | Ball Bearing | | 10 |
| 28 | JWBS20-328 | Spacer | | 4 |
| 29 | JWBS20-329 | Shaft | | 2 |
| 30 | TS-0270031 | Set Screw | 5/16-18 x 3/8 | 2 |
| 31 | JWBS20-2 | Lock Knob | | 1 |
| 32 | TS-081F052 | Screw | 1/4-20 x 3/4 | 1 |
| 33 | JWBS18-333 | Hand Wheel | | 1 |
| 34 | TS-0267041 | Set Screw | 1/4-20 x 3/8 | 1 |
| 35 | JWBS20-103A | Handle | | 1 |
| 36 | JWBS18DX-336 | Cutting Height Scale | | 1 |
| 37 | JWBS18DX-337 | Bracket | | 1 |
| 38 | JWBS18DX-338 | Base | | 1 |
| 39 | JWBS20-339 | Threaded Lock Bushing | | 1 |
| 40 | JWBS20-340 | Bolt | | 1 |
| 41 | JWBS18DX-341 | Lock Knob | | 1 |
| 42 | JWBS20-342 | Screw | | 2 |
| 44 | TS-0207041 | Socket Head Cap Screw | 1/4-20 x 3/4 | 2 |
| 45 | TS-0680021 | Flat Washer | 1/4 | 2 |
| 46 | JWBS20-360 | Bracket | | 1 |
| 47 | JWBS20-324 | Wing Screw | | 2 |
| 48 | TS-1521011 | Set Screw | M4 x 4 | 8 |
| 49 | JWBS20-349 | Knob | | 2 |
| 50 | TS-0207031 | Socket Head Cap Screw | 1/4-20 x 5/8 | 2 |
| 51 | TS-0207021 | Socket Head Cap Screw | 1/4-20 x 1/2 | 2 |
| 52 | JWBS20-352 | Bracket | | 1 |
| 53 | JWBS20-353 | Thumb Screw | 1/4-20 x 1/2 | 2 |
| 54 | JWBS20-354 | Bearing Support | | 2 |
| 55 | JWBS20-355 | Lock Bushing | | 1 |
| 56 | TS-0206021 | Socket Head Cap Screw | #10-24x1/2 | 2 |

Parts List: Blade Guide Assembly

| Index No. | Part No. | Description | Size | Qty |
|-----------|--------------|--------------------|------------|-----|
| 57 | JWBS18DX-357 | Bearing Bracket | | 1 |
| 58 | 6295293 | Locking Handle | | 1 |
| 59 | JWBS18DX-359 | Locking Handle | | 1 |
| 60 | JWBS18DX-360 | Shaft | | 1 |
| 61 | JWBS18DX-361 | Adjusting Screw | | 1 |
| 62 | JWBS18DX-362 | Adjusting Bracket | | 1 |
| 63 | JWBS18DX-363 | Nut | | 1 |
| 64 | TS-0267021 | Set Screw | 1/4-20x1/4 | 1 |
| 65 | JWBS18DX-365 | Set Screw, Special | | 1 |
| 66 | JWBS18DX-366 | Adjustment Handle | | 2 |
| 67 | TS-0680031 | Flat Washer | 5/16 | 1 |
| 68 | JWBS20-329A | Lower Shaft | | 2 |
| 69 | TS-0561011 | Hex Nut | 1/4-20 | 1 |

Blade Guide Assembly



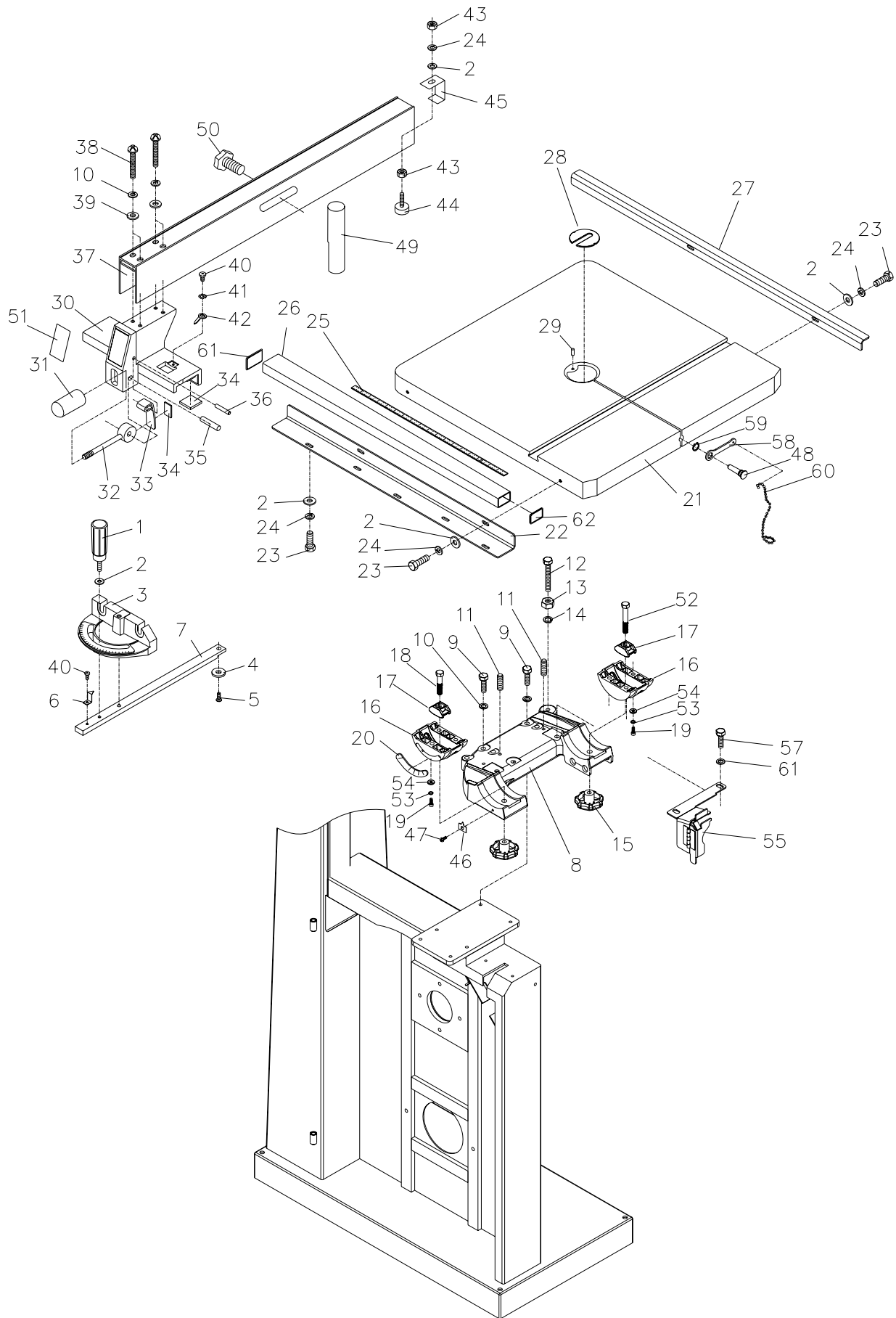
Parts List: Table and Fence Assembly

| Index No. | Part No. | Description | Size | Qty |
|-----------|--------------|----------------------------|-----------------|-----|
| 1 | JWBS18-401 | Lock Handle | | 1 |
| 2 | TS-0680021 | Flat Washer | 1/4 | 11 |
| 3 | JWBS18-403 | Miter Gauge Body | | 1 |
| 4 | JWBS20-156 | Guide Disc | | 1 |
| 5 | JWBS18-405 | Screw | M6 x 8 | 1 |
| 6 | JWBS18-406 | Pointer | | 1 |
| 7 | JWBS18-407 | Guide Bar | | 1 |
| 8 | JWBS18DX-408 | Trunnion Support Bracket | | 1 |
| 9 | TS-0051071 | Hex Cap Screw | 5/16-18 x 1-1/2 | 4 |
| 10 | TS-0720081 | Lock Washer | 5/16 | 8 |
| 11 | TS-0270061 | Set Screw | 5/16-18 x 5/8 | 2 |
| 12 | TS-0060111 | Hex Cap Screw | 3/8-16x 2-1/2 | 1 |
| 13 | TS-0561031 | Hex Nut | 3/8-16 | 1 |
| 14 | TS-0720091 | Lock Washer | 3/8 | 1 |
| 15 | JWBS18-415 | Lock Knob | | 2 |
| 16 | JWBS18X-416 | Trunnion | | 2 |
| 17 | JWBS18-417 | Trunnion Clamp Shoe | | 2 |
| 18 | TS-1491081 | Hex Cap Screw | M10 x 50 | 1 |
| 19 | TS-1503041 | Socket Head Cap Screw | M6 x 16 | 6 |
| 20 | JWBS18-420 | Scale | | 1 |
| 21 | JWBS18-421 | Table | | 1 |
| 22 | JWBS18-422W | Front Rail | | 1 |
| 23 | TS-0050021 | Hex Cap Screw | 1/4-20 x 5/8 | 9 |
| 24 | TS-0720071 | Lock Washer | 1/4 | 10 |
| 25 | JWBS18-425 | Scale | | 1 |
| 26 | JWBS18-426W | Guide Rail | | 1 |
| 27 | JWBS18-427W | Rear Rail | | 1 |
| 28 | JWBS20-144 | Table Insert | | 1 |
| 29 | JWBS20-145 | Roll Pin | 3 x 10 | 1 |
| 30 | JWBS18-430 | Fence Body | | 1 |
| 31 | JWBS18-431 | Knob | | 1 |
| 32 | JWBS18-432 | Lock Handle | | 1 |
| 33 | JWBS18-433W | Lock Plate | | 1 |
| 34 | JWBS18-434 | Pad | | 5 |
| 35 | JWBS18-435 | Pin | | 1 |
| 36 | JWBS18-436 | Pin | | 1 |
| 37 | JWBS18-437 | Fence | | 1 |
| 38 | TS-0081031 | Hex Cap Screw | 5/16-18 x 3/4 | 4 |
| 39 | TS-0680031 | Flat Washer | 5/16 | 4 |
| 40 | TS-0810012 | Screw | #10-24 x 1/4 | 2 |
| 41 | TS-0733031 | External Tooth Lock Washer | #10 | 1 |
| 42 | JWBS18-442 | Pointer | | 1 |
| 43 | TS-0561011 | Hex Nut | 1/4-20 | 2 |
| 44 | JWBS18-444 | Sliding Pad | | 1 |
| 45 | JWBS18-445 | Rear Hook | | 1 |
| 46 | JWBS18-446 | Pointer | | 1 |
| 47 | JWBS18-447 | Screw | M5 x 8 | 1 |
| 48 | JWBS18DX-448 | Table Pin | | 1 |
| 49 | JWBS18-449 | Resaw Post | | 1 |
| 50 | JWBS18-450 | Lock Knob | | 1 |
| 51 | JWBS18-451 | JET Fence Label | | 1 |
| 52 | TS-2210651 | Hex Cap Screw | M10 x 65 | 1 |
| 53 | TS-1551041 | Lock Washer | M6 | 6 |
| 54 | TS-1550041 | Flat Washer | M6 | 6 |
| 55 | JWBS18DX-455 | Lower Blade Guard | | 1 |

Parts List: Table and Fence Assembly

| Index No. | Part No. | Description | Size | Qty |
|-----------|--------------|----------------------|-------------|-----|
| 57 | TS-0051091 | Hex Cap Screw | 5/16"-18x2" | 2 |
| 58 | 40-0260 | Wrench | | 1 |
| 59 | JWBS18DX-459 | C-Ring | S-10 | 1 |
| 60 | JWBS18DX-460 | Link Chain | | 1 |
| 61 | TS-0680031 | Flat Washer | 5/16" | 2 |
| 62 | 2013-285 | End Cover | | 2 |
| | JWBS18-MGCP | Miter Gauge Assembly | | 1 |
| | JWBS18-FCP | Fence Assembly | | 1 |

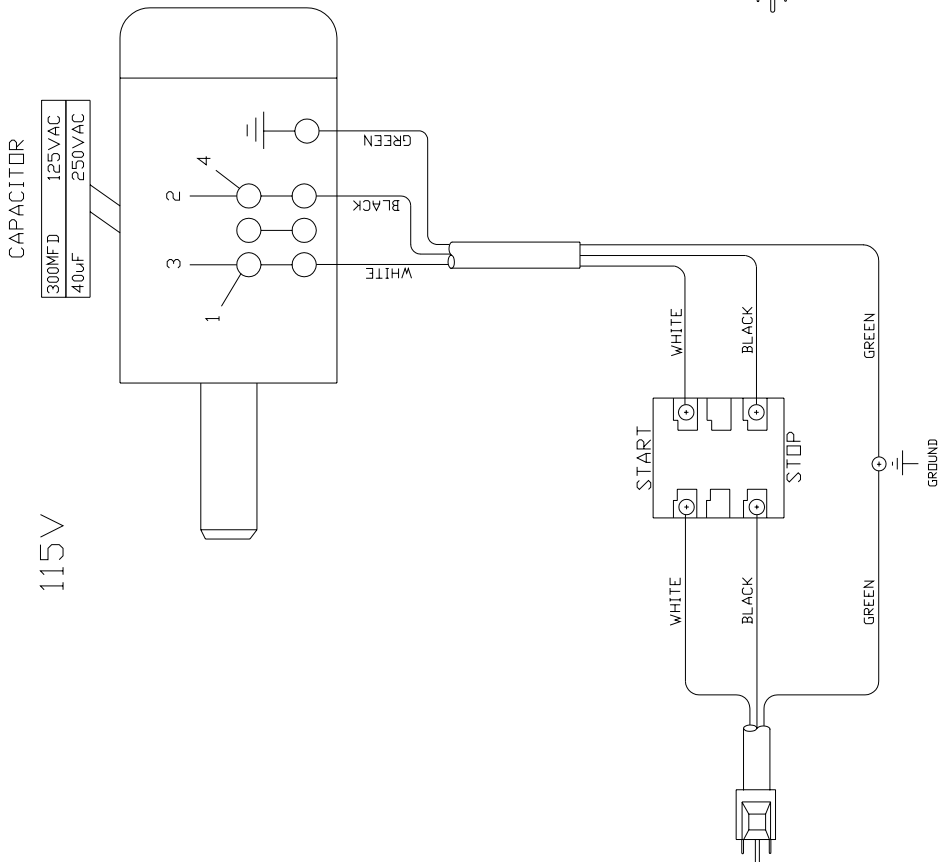
Table and Fence Assembly



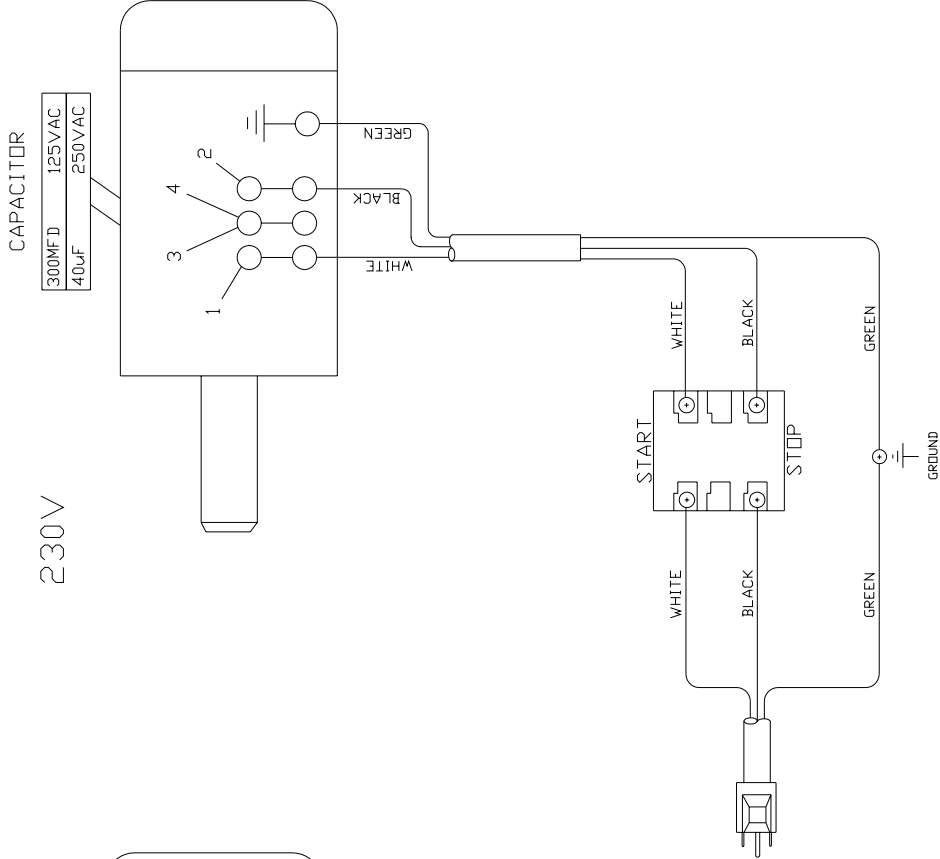
Electrical Connections

1.75HP 1Phase

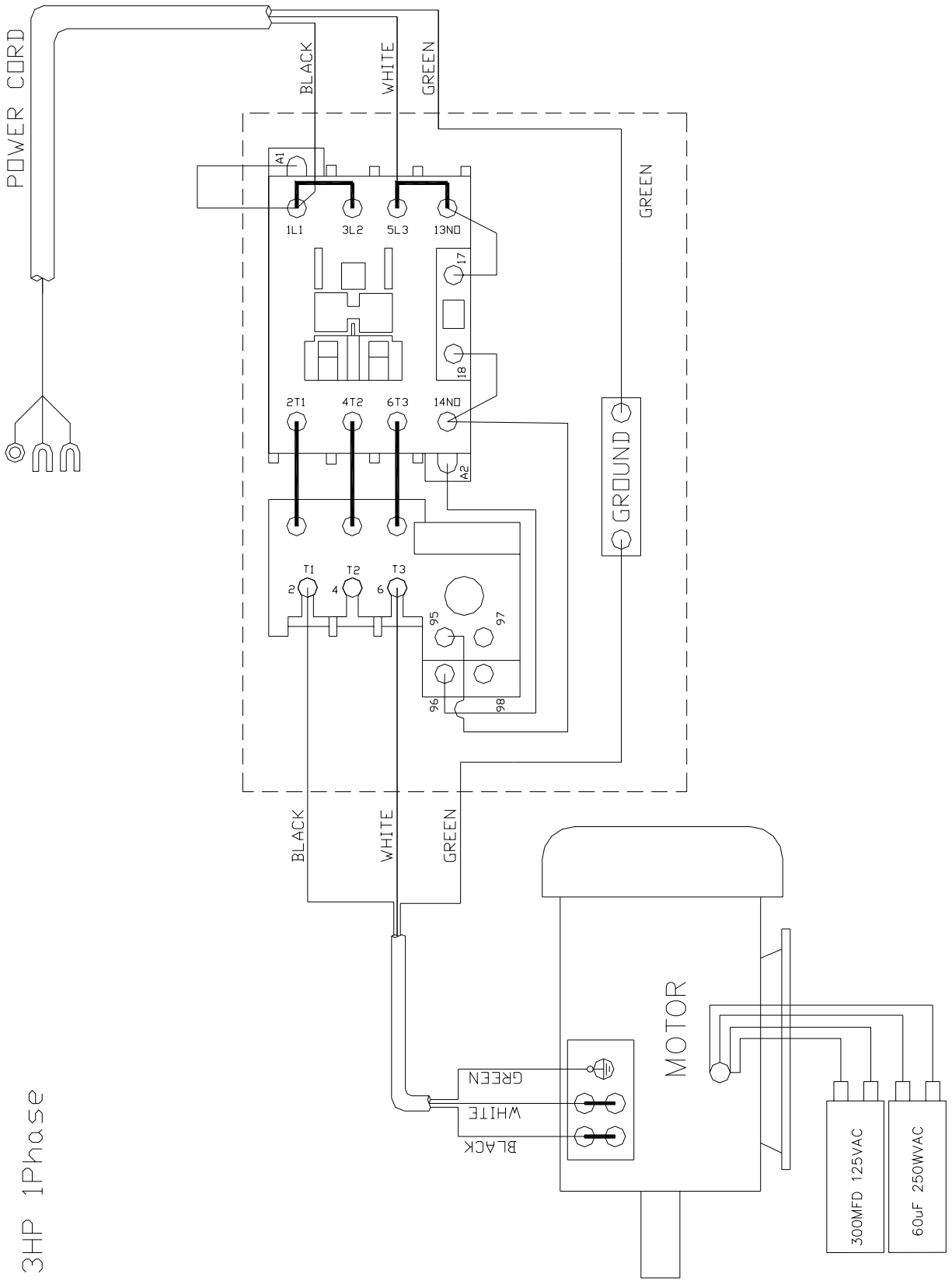
115V



230V



3HP 1Phase





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